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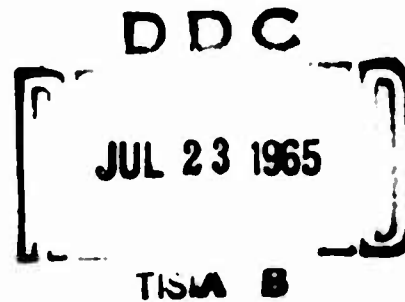
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**TABLES OF CAPACITOR  
DISCHARGE IN TRANSIENT  
GAMMA RADIATION ENVIRONMENTS**

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## APPENDIX: THE COMPUTER PROGRAM

Ceramic Capacitor Tables  
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Mylar Capacitor Tables  
Paper Capacitor Tables  
Oil-Filled Paper Capacitor Tables  
Resistance Simulation Tables



## 1.0 INTRODUCTION

The tables in this report give the response of various types of capacitors to various transient gamma radiation environments. The tables were generated on the Burroughs B5500 digital computer at Stanford University. The parameters used to characterize the capacitors were obtained from the TREE Handbook (Battelle Memorial Institute, DASA 1420, Feb., 1964) and "Analytical Methods for Predicting Transient Nuclear Radiation Effects on Electronics Circuits and Devices," (Boeing Corp., RTD TDR-63-3007, July 1963). The capacitor parameters in these reports represent only the average response of many similar capacitors to many different radiation environments. Unit-to-unit and manufacturer-to-manufacturer variations in the capacitors make it impossible to predict the effects of radiation exactly, so these tables should be considered as giving only a "typical" response of the particular capacitor to the given radiation environment. Assuming, however, that the capacitor parameters from the above reports are exact, then it is believed that the numbers given in the tables, with a few exceptions discussed later, are accurate to three significant figures.

Additional tables are given at the end of this report. These tables give the voltage left across a capacitor at various times after  $t=0$  for a fixed resistance shorted across the capacitor at time  $t=0$ . The purpose of these tables is to help the design engineer simulate the effects of radiation. The organization and use of these tables are described in later sections of this report.

## 2.0 ORGANIZATION OF TABLES

### 2.1 Capacitor Tables

The one hundred forty-four capacitor tables in this report describe the response of six different types of capacitors to twenty-four different radiation environments. The column headings in each table give the particular external circuit time constant for which the column was calculated, and the row labels at the left in each table give the time after the initiation of the radiation event for which the row was calculated. The numbers given in the tables are the voltages left on the capacitor under the conditions described in the row, column, and table headings, assuming the initial voltage to be one volt. Thus the organization of the capacitor tables may be depicted schematically as in Figure 1.

(Type of capacitor)

(Capacitor parameters)

(Radiation pulse)

(Column headings: Recharging circuit time constants)

IM  
(infinity)

...

...

1 US

1 2

0  
1 US

(Row labels: times after start of radiation pulse)

The numbers here are for: The capacitor type in the table heading, using the parameters listed in the heading, in the radiation pulse described in the heading, in a circuit with the time constant given by the column headings, at a time after the start of radiation given by the row labels, for an assumed initial capacitor voltage of 1 volt.

10 Sec.

Figure 1: Organization of the capacitor tables.

The radiation environments used are rather idealized versions of typical flash x-ray, nuclear weapon, pulsed reactor, or (with reservations about the effects of particle charge) pulsed accelerator transient radiation environments. The general form of the assumed environment is a short, high intensity rectangular radiation pulse followed by lower level steady radiation (see Figure 2). It is believed that some sort of approximation to the environments listed above can be found either in the tables or by interpolating between tables. The twenty-four radiation environments are found by taking each of the initial rates of  $10^{10}$ ,  $10^{11}$ ,  $10^{12}$ , and  $10^{13}$  Rads/sec and for each initial rate using each of the final rates of 0,  $10^3$ ,  $10^4$ ,  $10^5$ ,  $10^6$ , and  $10^7$  Rads/sec. The 4 initial rates together with the 6 final rates give the 24 radiation environments for which the capacitor tables are calculated.

The initial pulse is assumed to last for 25 nanoseconds. This duration was chosen because:

- (1) it is convenient for numerical evaluations of the capacitor discharge equations, and
- (2) it approximately corresponds to the pulse length expected from the Lockheed Missiles and Space Company 2 Mev flash x-ray machine scheduled to be operational in April 1965.

Normalization of the capacitor tables to different initial pulse durations is discussed later.

The six types of capacitors chosen for inclusion in this report are those on which adequate information is available in the IEEE Handbook. They are, in the order in which they appear in this report:

- Ceramic capacitors (barium titanate)
- Tantalum capacitors (solid)
- Mica capacitors
- Mylar capacitors
- Paper capacitors (Vitamin Q)
- Oil-Filled Paper capacitors (Gudeman)

It is hoped that this report will be kept updated as information on other types of capacitors becomes available in the literature. In addition, present plans call for characterization of certain types of capacitors, particularly glass and wet tantalum, on the LMSC 2 Mev flash x-ray facility mentioned above.

In almost all practical applications of capacitors, the capacitor will be receiving charge from an outside circuit while the radiation field is discharging it. For this reason, the voltage left on the capacitor is calculated in these tables for a number of time constants of the external recharging circuit. These time constants are infinity (open recharging circuit),  $R_0 C = 10$  sec, 1 sec, 100 ms, 10 ms, 1 ms, 100 us, 10 us, and 1 us. These numbers form the column headings in the capacitor tables. In order to keep the tables to a reasonable, or indeed, finite, size, it was necessary to make the following assumptions.

- (1) Figure 3 shows the equivalent circuit of the capacitor. The switch is assumed to close at time  $t = 0$ .
- (2) The battery  $V_0$  and the resistance  $R_0$  represent the Thevenin equivalent circuit of the capacitor driving circuit during the radiation pulse, and do not change during the pulse; this circuit includes any inherent capacitor leakage resistance.
- (3) The battery voltage  $V_0$  is the same before and during the radiation pulse, and the capacitor is charged to  $V_0$  before the pulse starts.
- (4) The resistance  $R_0$  may be different before and during the pulse, but it must be possible to reasonably approximate it by a constant resistance during the pulse. The value of  $R_0$  during the pulse must be used to calculate the time constant.
- (5) Permanent radiation damage is neglected.

It is certainly true that most circuits will not exactly satisfy these assumptions during the pulse, but it is also true that for most cases these assumptions are quite reasonable.

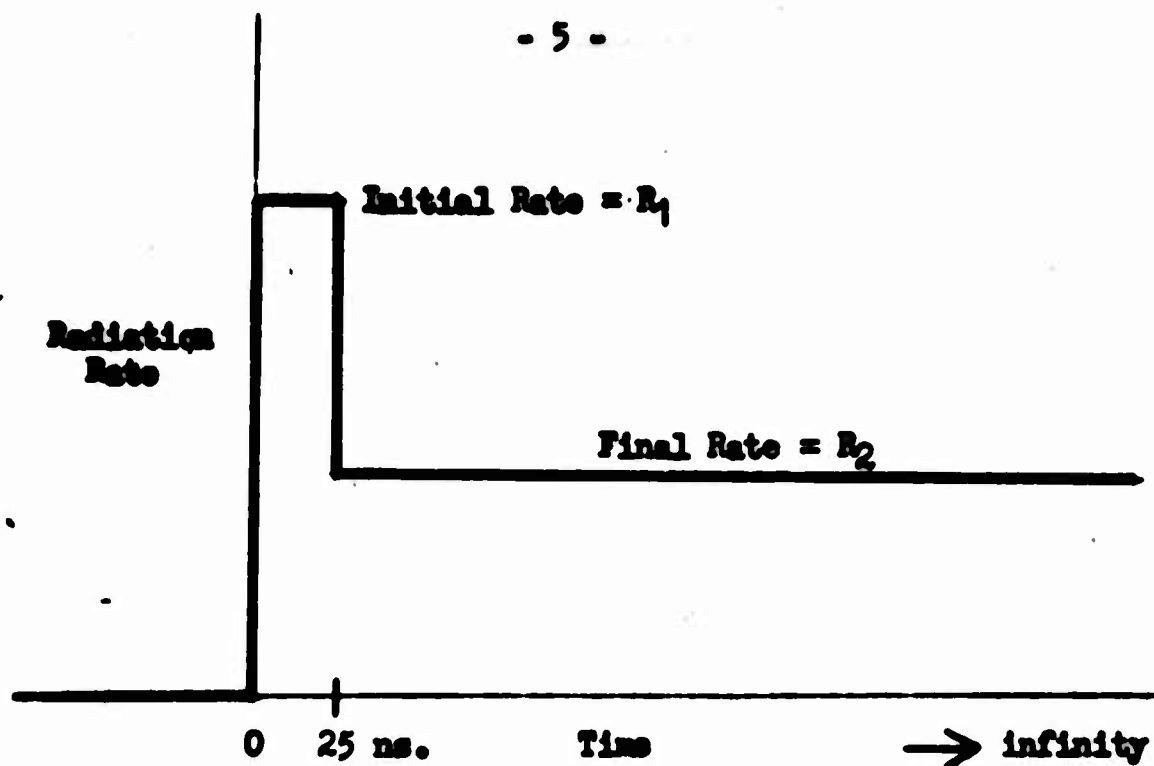


Figure 2: Radiation pulse assumed in calculation of capacitor tables.

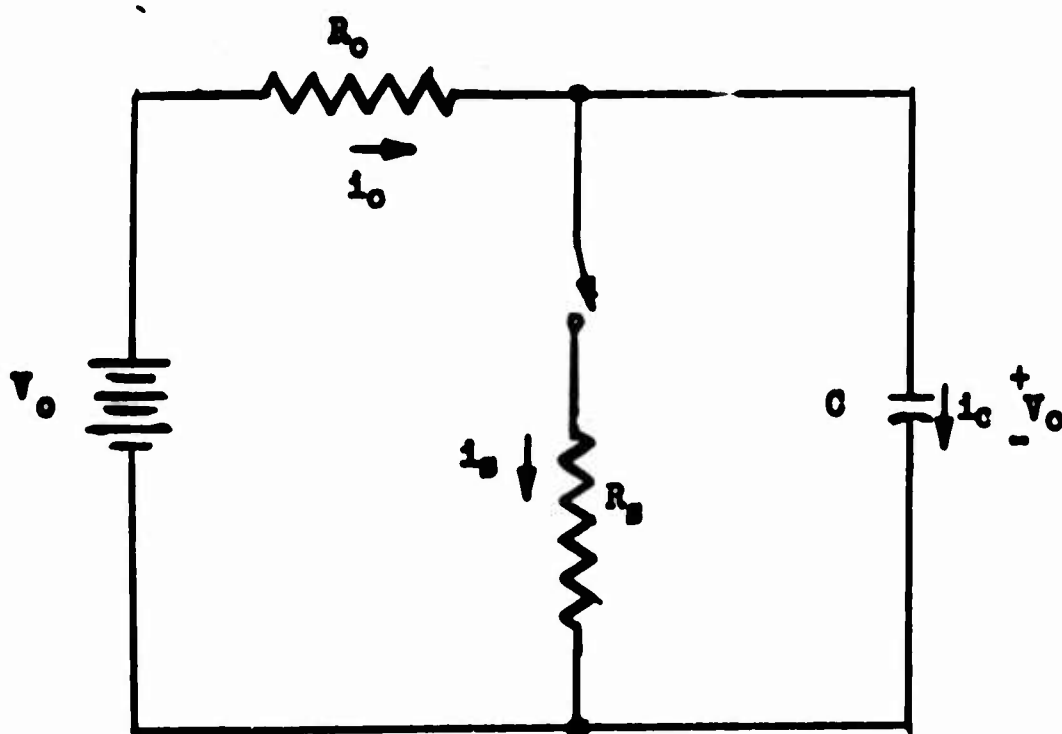


Figure 3: Capacitor equivalent circuit. The switch closes at the start of the radiation pulse.

The row labels in the capacitor tables are the times after the initiation of the radiation event for which the numbers in the row are calculated. The first row is at time  $t = 0$  for which the capacitor voltage is defined to be 1 volt; the second row is at 25 ns, the end of the first pulse, and the third through twenty-fourth rows are times during the second radiation rate, going from 1  $\mu$ s to 10 sec in approximately logarithmic increments.

## 2.2 Resistance Simulation Tables

The last nine tables are for the convenience of the designer in simulating the effects of radiation.

## 3.0 USE OF TABLES

### 3.1 Capacitor Tables

Consider the following problem: Find the best capacitor for which data is available for use in a radiation environment consisting of an initial pulse of  $10^{12}$  Rads/sec for 25 nsec followed by a constant rate of  $10^5$  Rads/sec. The time constant of the external charging circuitry is 10 msec and the circuit must operate 100 msec after the start of the radiation transient.

To solve this problem it is necessary to look up one data point for each type of capacitor. First look in that table for ceramic capacitors which is calculated for an initial pulse of  $10^{12}$  and a constant rate of  $10^5$  Rads/sec. Looking at the intersection of the 10 msec time constant column with the 100 msec time row, we find that 99.2% of the initial capacitor voltage remains at 100 ms. Repeating this process for the other capacitors we get the following table:

Capacitor type	Final voltage/initial voltage
Ceramic	0.992
Tantalum	0.932
Mica	0.997
Mylar	0.852
Paper	0.969
Oil-paper	0.826

Thus we would not want to use oil-filled paper or mylar in this application. Ceramic, mica, or possibly paper would be the indicated dielectric for this application, depending on the capacitance value needed and other circuit and permanent damage considerations.

As a second example consider the problem of interpolation. We might wish to interpolate between any combination of initial rate, final rate, time constant, or time. The two examples here will illustrate one possible technique of interpolation for one variable and for two variables. The technique illustrated may be used for any variable or combination of variables, but the amount of work involved goes up exponentially with the number of variables.

As a first example, suppose we wish to find the voltage on a ceramic capacitor if the initial radiation rate is  $10^{12}$  Rads/sec for 25 nsec., the final rate is  $10^5$  Rads/sec, the time of interest is 100 msec after the start of the radiation, and the circuit time constant is 30 msec. There is a table for ceramic capacitors in this radiation pulse, and the voltages at 100 msec are tabulated. However the time constant of 30 msec is not included in this table. Thus it is necessary to interpolate to get the voltage for a 30 ms time constant. At 100 ms after the start of radiation the voltages left on the capacitor for various time constants are:

Time constant	voltage
1 msec	0.993
10 msec	0.932
100 msec	0.505
1 sec	0.141

These numbers are plotted (on a semilog scale) in Figure 4. If a smooth curve is drawn through the points, we find that the voltage left at 100 msec for a circuit time constant of 30 msec is about 0.75 of the initial voltage.

To illustrate the graphical interpolation for two variables consider the above problem, except make the final rate  $5 \times 10^5$  Rads/sec. Now we must interpolate for both the time constant and the final radiation rate. One way of doing this is to repeat the previous interpolation for several final rates and plot the voltage vs final rate for a time constant of 30 ms. The four curves in Figure 5 show the interpolation

for the time constant of 30 msec for final rates of  $10^4$ ,  $10^5$ ,  $10^6$ , and  $10^7$  Rads/sec. Figure 6 then plots the four voltages for a 30 msec time constant vs the final rate. From this figure we see that the voltage left is about 0.52 of the original voltage.

Obviously this same technique can be used for any number of variables, and the order in which the interpolations are made is not too critical. The number of points used is strictly a matter of judgement. I used four here simply to illustrate that two might not be enough. Of course, there is no guarantee of accuracy in these interpolations, but in view of the expected capacitor-to-capacitor response variations, the accuracy should be quite sufficient for engineering use.

Another problem which might arise in the use of these tables is how do we calculate the voltage left if the initial pulse has a different length than the 25 nsec used for the initial pulse used in these tables? The answer is, very simply, that if the initial pulse length is short compared to all capacitor and circuit time constants, then the voltage at the end of the pulse is proportional to the duration of the pulse. A good engineering approximation to the voltage after any length of time can be made by plotting the case of interest from the table with the initial pulse length equal to 25 ns and then plotting initial drop for the other initial pulse length and making the voltage left at longer times asymptotic to the first plot. An easy interpolation for the initial pulse magnitude may be found from the fact that the voltage drop from the first pulse is proportional to the delta'th power of the initial radiation rate.

### 3.2 Resistance Simulation Tables

The purpose of these tables is to help the designer simulate the effects of the radiation pulse in his circuit without actually irradiating the circuit. Consider the switch in Figure 3 to be a relay and  $R_g$  to be a fixed resistor. Then we might ask the question: for a particular capacitor type, a particular radiation rate, a particular circuit time constant, and a particular time at which we are interested in the performance of the circuit, what value of resistance should we use in the above simulation to give the same capacitor voltage at the time of interest that the radiation pulse gives? The resistance simulation tables are designed to help answer this question. Each table is calculated for a different time



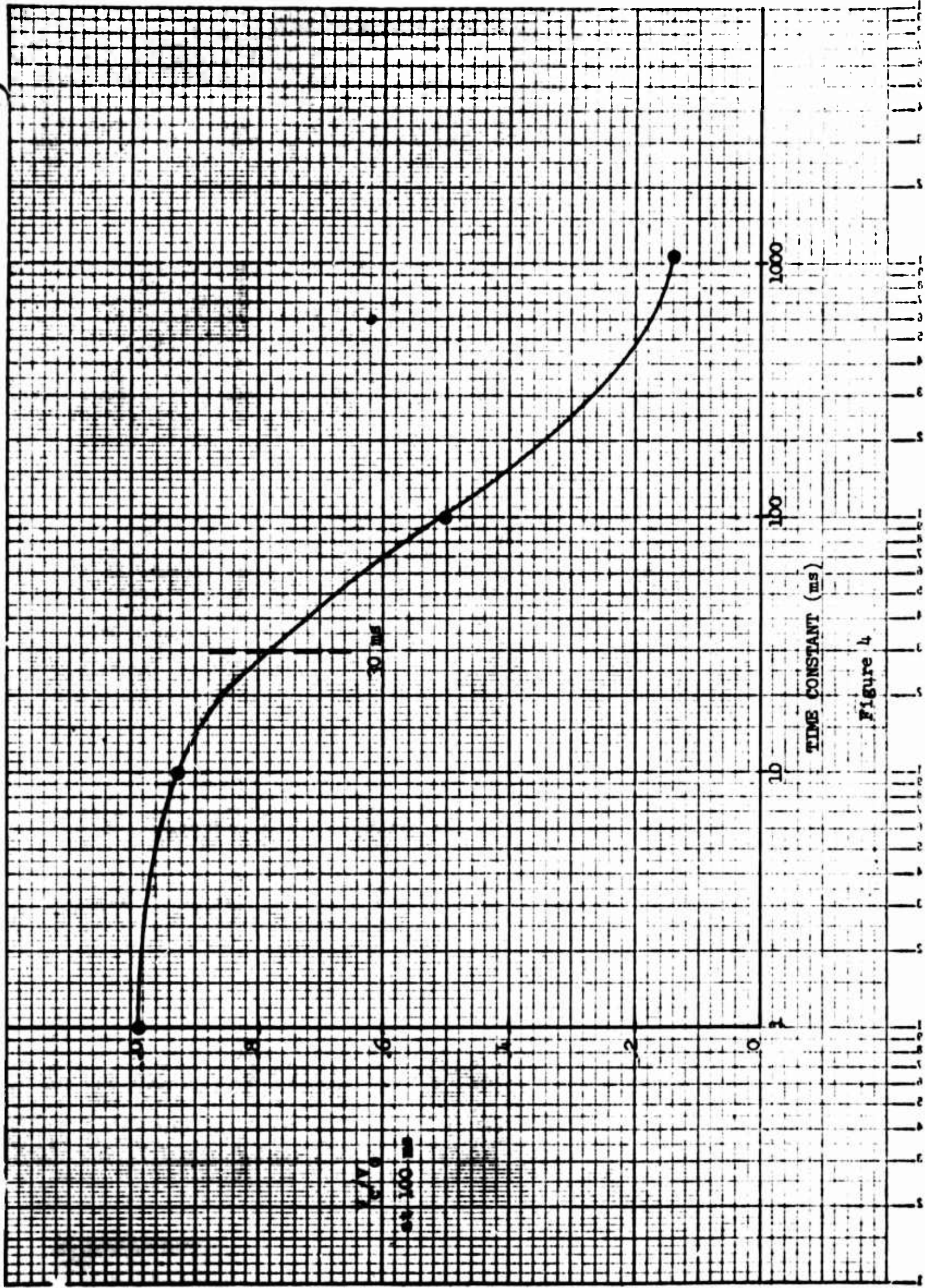


Figure 4



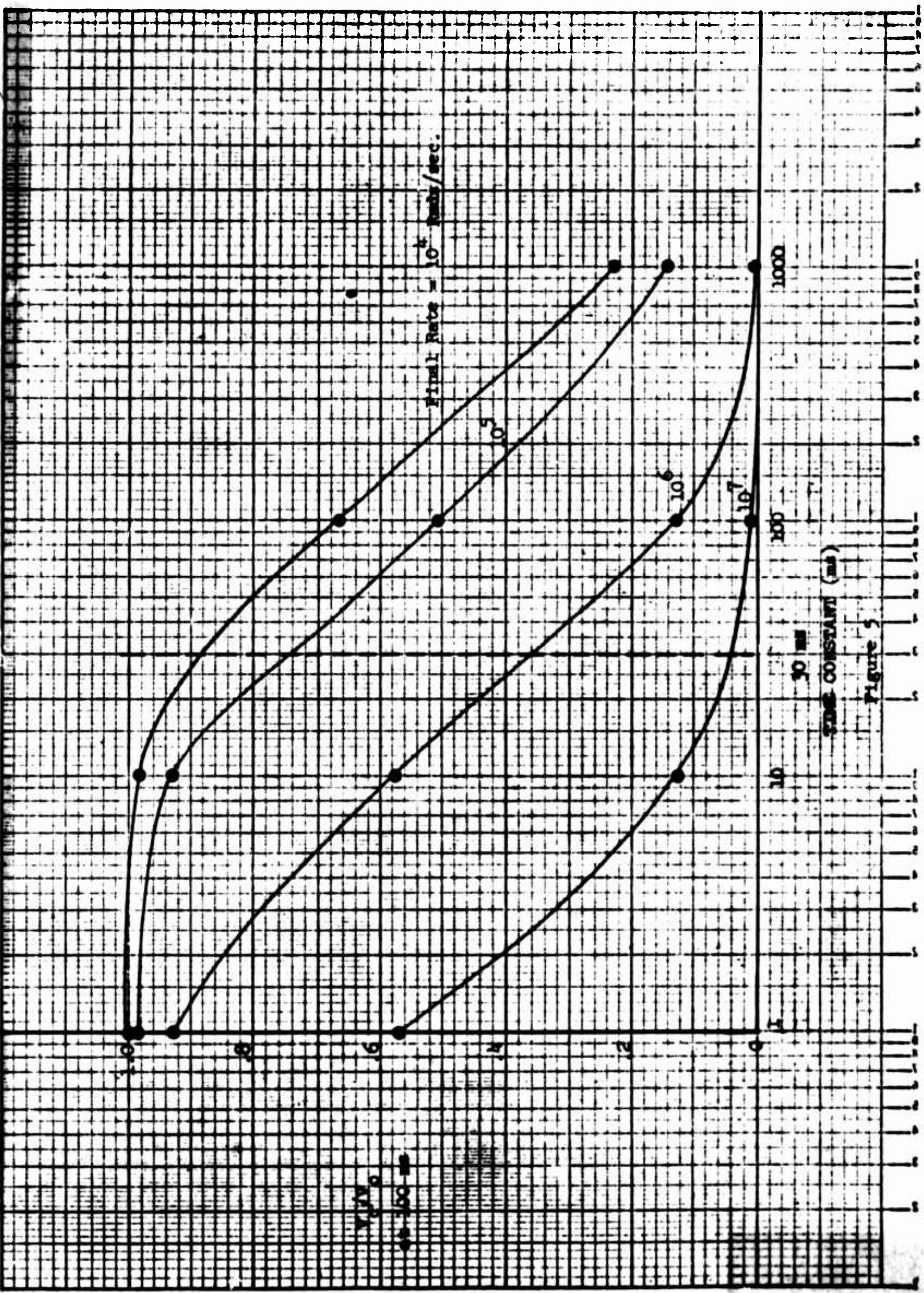


Figure 5

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RESEARCH CORPORATION  
SEMICONDUCTOR DIVISION  
SACRAMENTO, CALIF. 95834



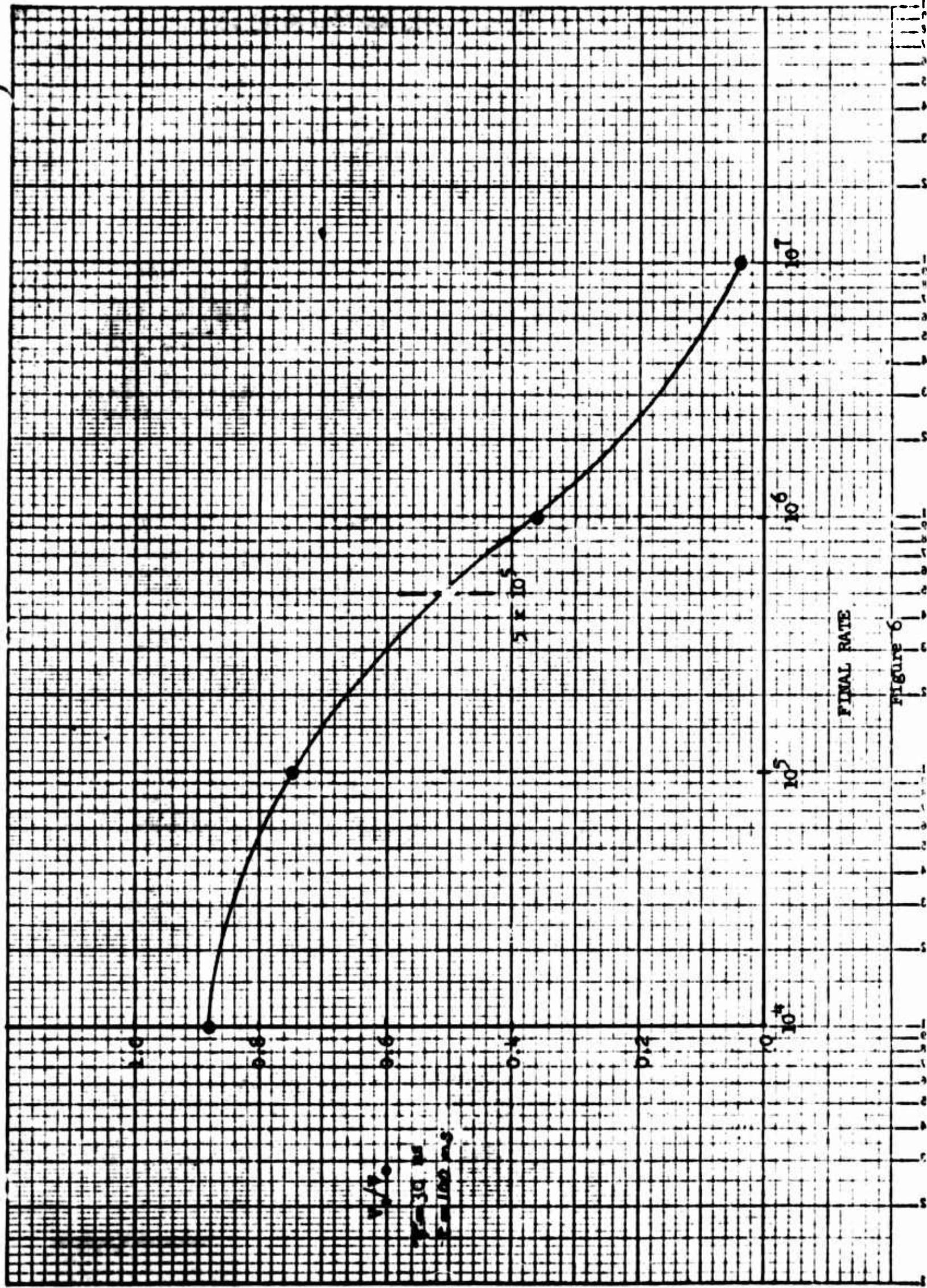


Figure 6

after the start of the radiation pulse. Across the tops of the tables are various circuit time constants, corresponding to various  $R_0$ 's in Figure 3. The row headings are the time constants corresponding to  $R_0$  in Figure 3. The use of the tables is: First, look up the capacitor voltage left at the time of interest in the capacitor tables. Then go to the resistance table for the time of interest and find the column corresponding to the circuit series time constant. Follow this column down until the voltage shown is about equal to the voltage found from the capacitor tables. The time constant at the left end of the row in which this number is found gives a value of resistance to use in a circuit simulation.

As an example of this technique consider that we wish to simulate the discharge of a mylar capacitor in a circuit with a series time constant of 10 msec. The radiation environment is an initial rate of  $10^{12}$  Rads/sec and the final rate is  $10^5$  Rads/sec. The time of interest is 100 msec. From the appropriate mylar capacitor table we find that the voltage left under these conditions is 0.852 of the initial voltage. Going to the resistance table calculated for 100 ms and following the 10 ms time constant column down, we find that an equivalent fixed resistance for use in a simulation circuit corresponding to Figure 3 would be one that gave a time constant of between 1 and 10 ms and closer to 10 ms. If the capacitor were 1 ufd, then the equivalent resistance would be between 1000 and 10,000 ohms, and closer to 10,000 ohms.

#### 4.0 ACCURACY OF TABLES

The resistance simulation tables are exact to the number of significant figures given. It is believed that most of the numbers in the capacitance tables are accurate to three significant figures assuming absolute parameter accuracy. There are some erroneous points in these tables however. These errors arise because the numerical integration used in the computer program may run into inaccuracies under certain conditions. The integration routine used was a 201 point Simpson's rule procedure. There were no iterative or checking loops since experimentation showed that 200 points were enough to make most points accurate and checking would add unconscionably to the computer time. Errors in the table are fairly

obvious. They may arise whenever  $1/200$  of the time at which the number is calculated is on the same order of magnitude as, or greater than some circuit or capacitor time constant, but the capacitor has not yet reached a steady state. Those numbers satisfying the above conditions which are in error may generally be recognized because the rate of change of voltage in the table is faster than seems physically reasonable. Of course, variations in capacitors will give larger errors than any in the tables. Also, most of the parameters were measured at rates much lower than the initial rates used here. Extrapolation of data to the higher rates may also result in errors.

## 5.0 MATHEMATICAL DERIVATION

Consider the circuit in Figure 3. Assume that at time  $t = 0$  the switch is closed. Then, from Kirchoff's current law:

$$i_o = i_s + i_c . \quad (1)$$

By the definition of a capacitor:

$$i_c = C \frac{dV_c}{dt} , \quad (2)$$

and, from Ohm's law:

$$i_s = \frac{V_c}{R_s} , \quad (3)$$

$$i_o = \frac{V_o - V_c}{R_o} . \quad (4)$$

Thus:

$$\frac{V_o - V_c}{R_o} = \frac{V_c}{R_s} + C \frac{dV_c}{dt} . \quad (5)$$

If we set:

$$CR_o = \tau_o , \quad (6a)$$

$$CR_s = \tau_s , \quad (6b)$$

$$\frac{V_c}{V_o} = x , \quad (6c)$$

then equation 5 becomes:

$$\frac{dx}{dt} + x \left( \frac{1}{\tau_o} + \frac{1}{\tau_s} \right) = \frac{1}{\tau_o} . \quad (7)$$

Equation 7 is the basic differential equation which must be solved to get the transient response of the capacitor circuit. Assumptions listed in Section 2.1 will be used. This means that any time variation in Equation 7 must be in the  $\tau_s$  term.

From the TRAE Handbook,  $\tau_s$  is a function of time and is given by:

$$\begin{aligned} \frac{1}{\tau_s} = f(t) = & K_p \dot{\gamma}^\Delta(t) + K_{d1} \int_{-\infty}^t \exp \left[ \frac{t' - t}{\tau_{d1}} \right] \dot{\gamma}^\Delta(t') dt' \\ & + K_{d2} \int_{-\infty}^t \exp \left[ \frac{t' - t}{\tau_{d2}} \right] \dot{\gamma}^\Delta(t') dt' , \end{aligned} \quad (8)$$

where  $K_p$ ,  $\Delta$ ,  $K_{d1}$ ,  $\tau_{d1}$ ,  $K_{d2}$ , and  $\tau_{d2}$  are parameters of the material used in the capacitor dielectric, and  $\dot{\gamma}(x)$  is the radiation rate in Rads/sec at time  $x$ .

Equation 7 may be written to show its time dependence as:

$$\frac{dx}{dt} + x \left[ \frac{1}{\tau_o} + f(t) \right] = \frac{1}{\tau_o} . \quad (9)$$

This is a linear, first-order differential equation whose solution may be written:

$$\begin{aligned} x(t) = & \left[ 0 + \frac{1}{\tau_o} \int_0^t \exp \left( \int_0^t \left[ \frac{1}{\tau_o} + f(t) \right] dt \right) dt \right] x \\ & \exp \left( - \int_0^t \left[ \frac{1}{\tau_o} + f(t) \right] dt \right) , \end{aligned} \quad (10)$$

where  $G$  is an arbitrary constant selected to make  $x = x_0$  when  $t = 0$ ; i.e. if we set:

$$F(t) = \exp \left( \int \left[ \frac{1}{\tau_0} + f(t) \right] dt \right), \quad (11)$$

then, at time  $t_0$ :

$$x(t_0) = \left( \frac{1}{F(t_0)} \right) (x_0 F(0) + \frac{1}{\tau_0} \int_0^{t_0} F(t) dt). \quad (12)$$

Equations 8 and 11 may be solved to get  $F(t)$  in closed form. Two solutions are necessary, one for times during the initial pulse and the other for times during the final pulse. These solutions are incorporated in the computer program and are used to numerically integrate Equation 12, which has no closed form solution.

Equation 7 may be solved in closed form if  $\tau_s$  is constant. This solution is, for  $x = 1$  at  $t = 0$ :

$$x = \frac{\frac{1}{\tau_0} + \frac{1}{\tau_s} \exp \left[ - \left( \frac{1}{\tau_0} + \frac{1}{\tau_s} \right) t \right]}{\frac{1}{\tau_0} + \frac{1}{\tau_s}} \quad (13)$$

The resistance simulation tables were calculated by substituting various values of  $\tau_0$ ,  $\tau_s$ , and  $t$  in Equation 13.

#### APPENDIX: THE COMPUTER PROGRAM

The computer program used to calculate the capacitor tables was written in the version of ALGOL used by the Burroughs B5500 computer. A listing of the program is given in Figure A1, and a general flow chart is given in Figure A2. A description of the programming language may be found in Burroughs Corporation Report #5000-21012, "Extended ALGOL Reference Manual for the Burroughs B5000."

There are a few points which should be made for the benefit of anyone who wishes to rewrite this program for another machine.

1. A lot of computer time can be saved by minimizing the number of exponentiations required in the calculations. One way to help attain this goal is to make use of the fact that  $e^{nx} = (e^x)^n$  as is done in several places in this program.
2. If integration or differential equation solving techniques are used which adjust their step lengths until the errors are sufficiently small, then each table would probably require hours of computer time. This is because the step length will have to be less than the shortest time constant in the problem. The technique used here is to notice from Equations 12 and 8 that  $x$  approaches a constant at long times, to replace divergent values with this constant, and to accept the few errors that occur. Computer time for one table was about 20 sec. On the faster machines, say like the IBM 7094, it is estimated that one table would take about 10 sec., exclusive of I/O time.
3. Care should be used in factoring terms like

$$e^{(at - bt)}$$

into

$$e^{at} e^{-bt}$$

as it is easy to run into situations such as

$$e^{10^6} \cdot e^{-10^6}$$

in these calculations, giving magnitudes which no computer can handle.



```

BEGIN COMMENT TRANSIENT RADIATION ON CAPACITORS PROGRAM)
INTEGER N, II, JJ, KK)
COMMENT N IS NUMBER OF INTERVALS FOR SIMPSONS RULE AND MUST BE EVEN
II IS THE NUMBER OF CAPACITOR TYPES JJ IS THE NUMBER OF INITIAL RAT
ES KK IS THE NUMBER OF FINAL RATES)
READ(N, II, JJ, KK))
BEGIN REAL 00)
  ARRAY ZA, ZB(0 : 23))
  REAL MA, MB, MT)
  ARRAY ZZZ(0 : 8))
  ARRAY RTIM, TIME(0 : 23), OUTP, XO, TAUREC(0 : 8), INGR, EA, EB,
  TT(0 : N), DLA, KPA, KAA, TAA, KBA, TBA(0 : II), INRA, TIMRA(0
  : JJ), FINRA(0 : KK))
  ALPHA ARRAY ALLP(0 : 23), ALFY(0 : II, 0 : 4), ALFRA(0 : JJ))
  BOOLEAN BOLA, BOLB)
  INTEGER I, J, K, L, LL, LLL)
  REAL KP, DEL, KA, TA, KB, TB, SA, SB, A, B, C, D, AA, BB, CC,
  AAA, BBB, CCC, OA, OB, XT, VA, VB)

```

#### FORMAT

```

FOA(X19,"THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE"//
X32,"OF A ",5A6//
X28,"THE CAPACITOR PARAMETERS USED ARE:"//
X21,"KP=",E11.4," K01=",E11.4," K02=",E11.4/
X18,"DELTA=",E11.4," TD1=",E11.4," TD2=",E11.4//
X14,"THE RADIATION PULSE IS",E11.4," RADS/SEC FOR",E11.4," SEC"/
X20,"FOLLOWED BY A CONSTANT RATE OF",E11.4," RADS/SEC"//
X15,"TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT." /),
FOB(X14,"THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT TH
E"/
X22,"TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE" /),
FOC(X22,"TAU (TIME CONSTANT)"//
X11,"INF",X5,"10 SEC",X4,"1 SEC",X2,"100 MS",X4,"10 MS",X5,
"1 MS",X3,"100 US",X4,"10 US",X5,"1 US"/"TIME"),
FOD(A6,X3,9(F6.4,X3)))

```

```

FILL RTIM(*) WITH 0, 0, 0-6, 20-6, 50-6, 0-5, 20-5, 50-5, 0-4,
20-4, 50-4, 0-3, 20-3, 50-3, 0-2, 20-2, 50-2, 0-1, 20-1, .5, 1,
2, 5, 10)
FILL ALLP(*) WITH " 0 ", "XXXXXX", " 1 US", " 2 US",
" 5 US", " 10 US", " 20 US", " 50 US", "100 US", "200 US",
"500 US", " 1 MS", " 2 MS", " 5 MS", " 10 MS", " 20 MS",
" 50 MS", "100 MS", "200 MS", "500 MS", " 1 S ", " 2 S ",
" 5 S ", " 10 S ")
FILL TAUREC(*) WITH 0, .1, 1, 10, 100, 1000, 04, 05, 06)
EA(0) + EB(0) + 1.0)
TT(0) + 0)
ZA(0) + ZB(0) + 1.0)
READ(FOR I + 1 STEP 1 UNTIL II DO(FOR J + 0 STEP 1 UNTIL 4 DO
ALFY(I, J), DLA(I), KPA(I), KAA(I), TAA(I), KBA(I), TBA(I)))
READ(FOR I + 1 STEP 1 UNTIL JJ DO(INRA(I), TIMRA(I), ALFRA(I)))
READ(FOR I + 1 STEP 1 UNTIL KK DO FINRA(I))
FOR L + 1 STEP 1 UNTIL II DO
  BEGIN KP + KPA(L)
  DEL + DLA(L)

```

Figure A1: Program listing (page 1 of 3)

```

KA + KAA(LL)
KB + KBA(LL)
TA + TAA(LL)
TB + TBA(LL)
BOLA + KA = 0)
BOLB + KB = 0)
SA + KA * TA)
SB + KB * TB)
FOR LL + 1 STEP 1 UNTIL JJ DO
BEGIN TIM(1) + RTIM(1) + TIMRA(LL)
  ALLP(1) + ALFRA(LL)
  ZA(1) + IF BOLA THEN 1.0 ELSE EXP(- TIM(1) / TA)
  ZB(1) + IF BOLB THEN 1.0 ELSE EXP(- TIM(1) / TB)
  FOR I + 2 STEP 1 UNTIL 23 DO
  BEGIN TIM(I) + RTIM(I) + TIM(1)
    ZA(I) + IF BOLA THEN 1.0 ELSE EXP(- TIM(I) / TA)
    ZB(I) + IF BOLB THEN 1.0 ELSE EXP(- TIM(I) / TB)
  END)
  OA + INRA(LL) + DEL)
  B + BB + SA * TA * OA)
  C + CC + SB * TB * OA)
  A + AA + OA * (KP + SA + SB)
  FOR LLL + 1 STEP 1 UNTIL KK DO
  BEGIN OB + FINRA(LL) + DEL)
    AAA + OB * (KP + SA + SB)
    BBB + IF BOLA THEN 0 ELSE SA * TA * (OB - OA * (1 - EXP(
      - TIM(1) / TA)))
    CCC + IF BOLB THEN 0 ELSE SB * TB * (OB - OA * (1 - EXP(
      - TIM(1) / TB)))
    WRITE(FOA, FOR I + 0 STEP 1 UNTIL 4 DO ALFY(L, I), KP,
      KA, KB, DEL, TA, TB, INRA(LL), TIMRA(LL), FINRA(LL))
    WRITE(FOB)
    WRITE(FOC)
    WRITE(FOD, ALLP(0), 1, 1, 1, 1, 1, 1, 1, 1)
    A + AA)
    B + BB)
    C + CC)
    ZZZ(0) + 0)
    FOR I + 1 STEP 1 UNTIL 8 DO ZZZ(I) + TAUREC(I) / (
      TAUREC(I) + AAA)
    FOR I + 0 STEP 1 UNTIL 8 DO XO(I) + OUTP(I) + 1.0)
    FOR I + 1 STEP 1 UNTIL 23 DO
    BEGIN WT + TIM(I)
      WA + ZA(I)
      WB + ZB(I)
      TT(I) + XT + WT / NI
      VA + EA(I) + IF BOLA THEN 1.0 ELSE EXP(- XT / TA)
      VB + EB(I) + IF BOLB THEN 1.0 ELSE EXP(- XT / TB)
      FOR J + 2 STEP 1 UNTIL N DO
      BEGIN EA(J) + EA(J - 1) * VA)
        EB(J) + EB(J - 1) * VB)
        TT(J) + TT(J - 1) + XT)
      END FILLING OF TIME ARRAYS)
      FOR J + 0 STEP 1 UNTIL N DO INOR(J) + EXP(B * (EA(J)
        - WA) + C * (EB(J) - WB)))

```

Figure A1: Program listing (page 2 of 3)

```

FOR J = 0 STEP 1 UNTIL 8 DO
  BEGIN 00 = OUTP(J)
    D = TAUREC(J)
    EA(N) = 1.0)
    VA = EA(N = 1) + EXP(- XT * (D + A))
    FOR K = A = 2 STEP = 1 UNTIL 0 DO EA(K) = EA(K +
    1) * VA)
    VA = EA(0) * INGR(0) + EA(N) * INGR(N)
    VB = 0)
    FOR K = 1 STEP 2 UNTIL N = 1 DO VB = VB + INGR(K
    ) * EA(K))
    VA = 4.0 * VB + VA)
    VB = 0)
    FOR K = 2 STEP 2 UNTIL N = 2 DO VB = VB + INGR(K
    ) * EA(K))
    VA = XT * D * (2.0 * VB + VA) / 3)
    OUTP(J) = XO(J) * EXP(- NT * (D + A) + B * (1 - WA
    ) + C * (1 - WB)) + VA)
    IF 1.0 < OUTP(J) THEN OUTP(J) = ZZZ(J) ELSE IF 2
    < 1 AND OUTP(J) > ZZZ(J) AND 00 S ZZZ(J) THEN
    OUTP(J) = ZZZ(J)
  END FIX TIME VARY TAU)
  WRITE(FDD, ALLP(1), FOR J = 0 STEP 1 UNTIL 8 DO
  OUTP(J))
  IF I = 1 THEN
    BEGIN A = AAA)
      B = BBB)
      C = CCC)
      FOR J = 0 STEP 1 UNTIL 8 DO XO(J) = OUTP(J)
    END COEFFICIENT CHANGE)
  END STEP THROUGH TIME)
  WRITE(PAGE))
  END FINAL RATES)
  END INITIAL RATES)
  END CAPACITORS)
  END INNER BLOCK)
  END.

```

Figure A1: Program listing (page 3 of 3)

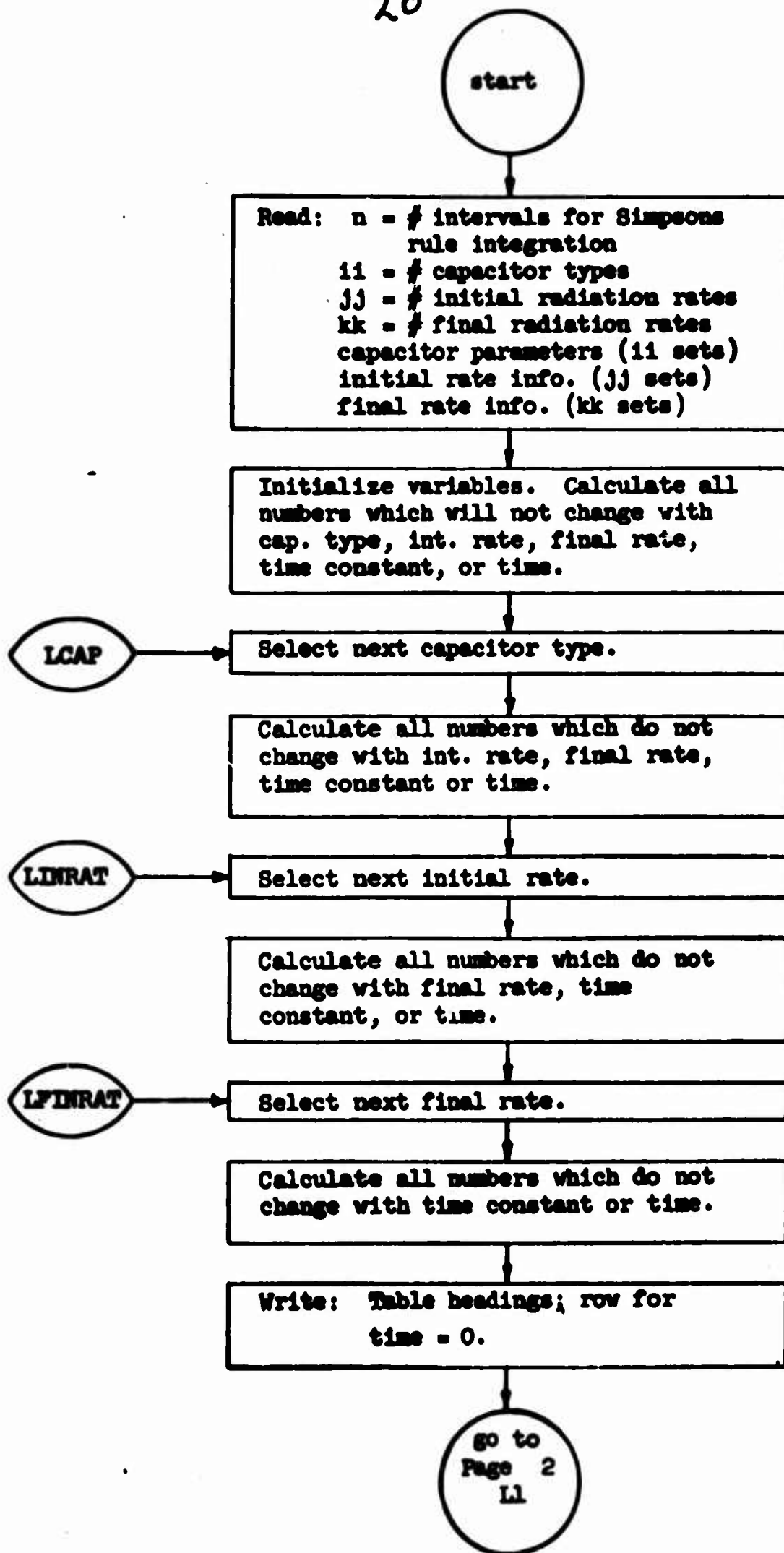


Figure A2: Program Flow Chart (page 1 of 3)

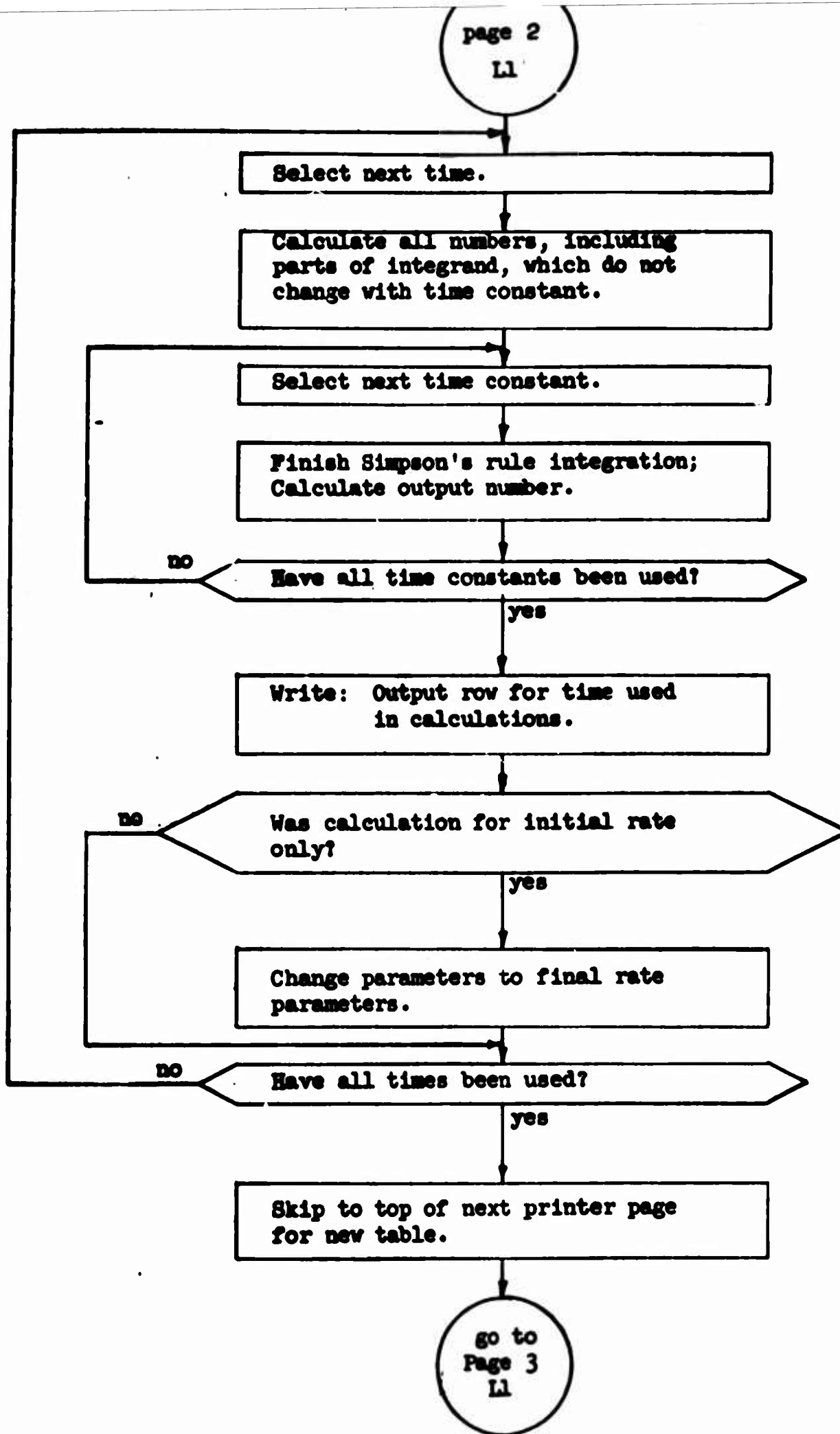


Figure A2: Program Flow Chart (Page 2 of 3)

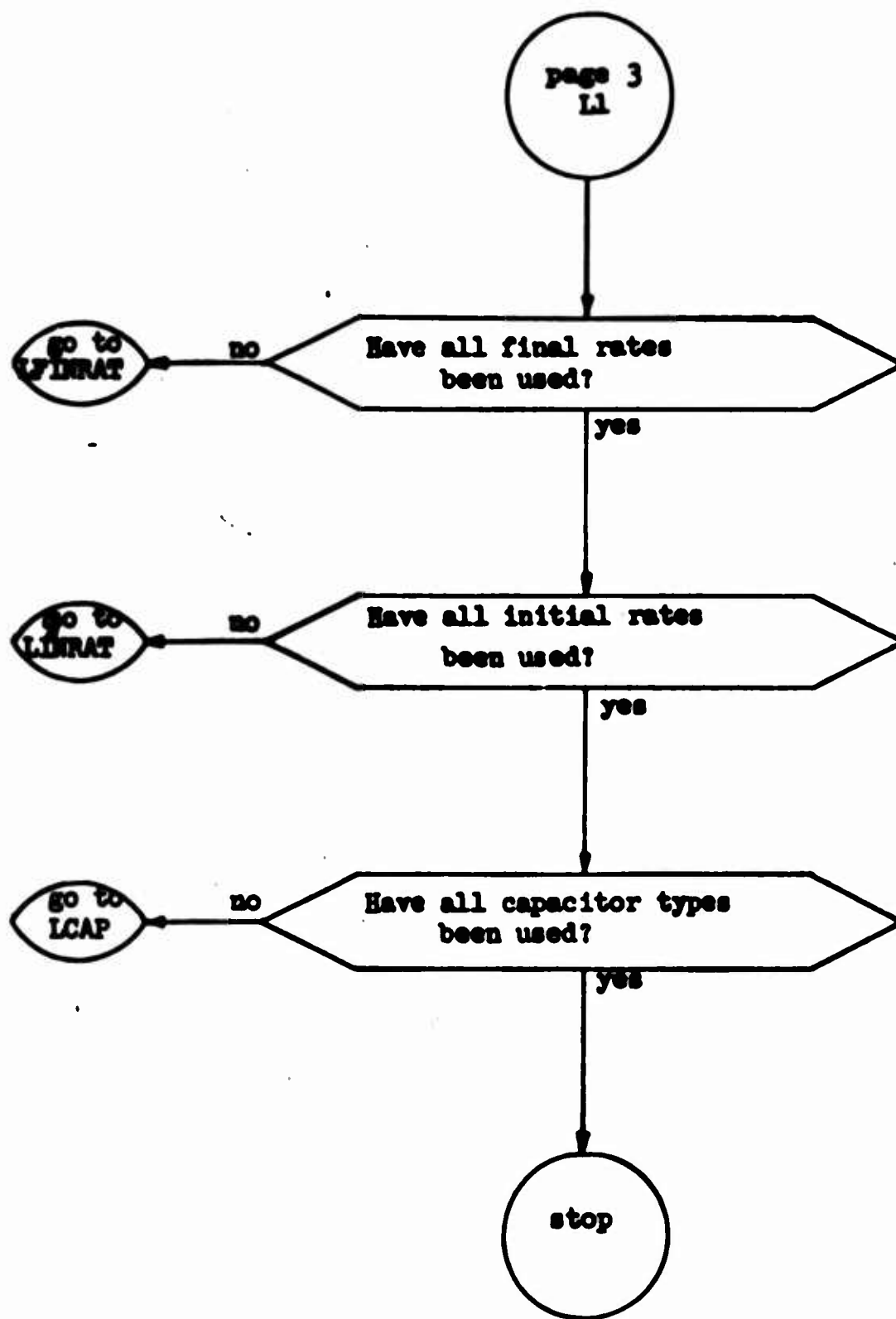


Figure A2: Program Flow Chart (page 3 of 3)

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A CERAMIC CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-07 K01= 6.0000E-02 K02= 5.0000E-06  
DELTA= 1.0000E+00 T01= 2.4000E-05 T02= 1.1000E+00

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 0.0000E+00 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
10 NS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
1 US	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
2 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997
5 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997
10 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997
20 US	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996
50 US	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995
100 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
200 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
500 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
1 MS	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
2 MS	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
5 MS	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
10 MS	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
20 MS	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
50 MS	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
100 MS	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
200 MS	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
500 MS	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
1 S	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992
2 S	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992
5 S	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992
10 S	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A CERAMIC CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
KP= 9.0000E-07 K01= 6.0000E-02 K02= 5.0000E-06  
DELTA= 1.0000E+00 T01= 2.4000E-05 T02= 1.1000E+00

THE RADIATION PULSE IS 1.0000E+10 RAD/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+03 RAD/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9999
1 US	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9999
2 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	1.0000
5 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	1.0000
10 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	1.0000
20 US	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9999	1.0000
50 US	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9996	1.0000	1.0000
100 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9998	1.0000	1.0000
200 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9999	1.0000	1.0000
500 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	1.0000	1.0000	1.0000
1 MS	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	1.0000	1.0000	1.0000
2 MS	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	1.0000	1.0000	1.0000
5 MS	0.9994	0.9994	0.9994	0.9994	0.9994	1.0000	1.0000	1.0000	1.0000
10 MS	0.9994	0.9994	0.9994	0.9994	0.9994	1.0000	1.0000	1.0000	1.0000
20 MS	0.9993	0.9993	0.9994	0.9994	0.9994	1.0000	1.0000	1.0000	1.0000
50 MS	0.9992	0.9992	0.9993	0.9993	0.9993	1.0000	1.0000	1.0000	1.0000
100 MS	0.9990	0.9990	0.9991	0.9991	0.9991	1.0000	1.0000	1.0000	1.0000
200 MS	0.9986	0.9986	0.9988	0.9988	0.9988	1.0000	1.0000	1.0000	1.0000
500 MS	0.9972	0.9972	0.9973	0.9973	0.9973	1.0000	1.0000	1.0000	1.0000
1 S	0.9944	0.9947	0.9965	0.9965	0.9965	1.0000	1.0000	1.0000	1.0000
2 S	0.9877	0.9888	0.9944	0.9944	0.9944	1.0000	1.0000	1.0000	1.0000
5 S	0.9655	0.9724	0.9924	0.9924	0.9924	1.0000	1.0000	1.0000	1.0000
10 S	0.9284	0.9536	0.9922	0.9922	0.9922	1.0000	1.0000	1.0000	1.0000

$10^{10}, 10^3$



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A CERAMIC CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-07 K01= 6.0000E-02 K02= 5.0000E-06  
DELTA= 1.0000E+00 T01= 2.4000E-05 T02= 1.1000E+00

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+04 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 NS	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	
1 US	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9999	
2 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	1.0000	
5 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	1.0000	
10 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	1.0000	
20 US	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9999	1.0000	
50 US	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9996	1.0000	1.0000	
100 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9995	0.9997	1.0000	1.0000	
200 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9995	0.9999	1.0000	1.0000	
500 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9996	1.0000	1.0000	1.0000	
1 MS	0.9994	0.9994	0.9994	0.9994	0.9994	0.9998	1.0000	1.0000	1.0000	
2 MS	0.9994	0.9994	0.9994	0.9994	0.9995	0.9999	1.0000	1.0000	1.0000	
5 MS	0.9993	0.9993	0.9993	0.9993	0.9995	0.9999	1.0000	1.0000	1.0000	
10 MS	0.9992	0.9992	0.9992	0.9992	0.9996	0.9999	1.0000	1.0000	1.0000	
20 MS	0.9989	0.9989	0.9989	0.9989	0.9997	0.9999	1.0000	1.0000	1.0000	
50 MS	0.9981	0.9981	0.9981	0.9981	0.9997	0.9999	1.0000	1.0000	1.0000	
100 MS	0.9967	0.9967	0.9967	0.9967	0.9997	0.9999	1.0000	1.0000	1.0000	
200 MS	0.9936	0.9937	0.9942	0.9942	0.9997	0.9999	1.0000	1.0000	1.0000	
500 MS	0.9820	0.9824	0.9856	0.9859	0.9996	0.9999	1.0000	1.0000	1.0000	
1 S	0.9573	0.9591	0.9715	0.9846	0.9998	0.9999	1.0000	1.0000	1.0000	
2 S	0.8978	0.9060	0.9500	0.9932	0.9992	0.9999	1.0000	1.0000	1.0000	
5 S	0.7160	0.7681	0.9294	0.9923	0.9992	0.9999	1.0000	1.0000	1.0000	
10 S	0.4841	0.6459	0.9273	0.9926	0.9992	0.9999	1.0000	1.0000	1.0000	

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A CERAMIC CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-07 KD1= 4.0000E-02 KD2= 5.0000E-06  
DELTA= 1.0000E+00 TD1= 2.4000E-05 TD2= 1.1000E+00

THE RADIATION PULSE IS 1.0000E+10 RAD/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+05 RAD/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	1C MS	1 MS	100 US	10 US	1 US	
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 MS	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	
1 US	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9999	
2 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	1.0000	
5 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	1.0000	
10 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	1.0000	
20 US	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9997	0.9998	1.0000	
50 US	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9996	1.0000	1.0000	
100 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9997	1.0000	1.0000	
200 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9995	0.9999	1.0000	1.0000	
500 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9995	0.9999	1.0000	1.0000	
1 MS	0.9992	0.9992	0.9992	0.9992	0.9992	0.9996	0.9999	1.0000	1.0000	
2 MS	0.9989	0.9989	0.9989	0.9990	0.9991	0.9997	0.9999	1.0000	1.0000	
5 MS	0.9982	0.9982	0.9982	0.9983	0.9987	0.9998	0.9999	1.0000	1.0000	
10 MS	0.9970	0.9970	0.9971	0.9972	0.9983	0.9998	0.9999	1.0000	1.0000	
20 MS	0.9946	0.9946	0.9947	0.9952	0.9978	0.9998	0.9999	1.0000	1.0000	
50 MS	0.9871	0.9872	0.9875	0.9899	0.9975	0.9998	0.9999	1.0000	1.0000	
100 MS	0.9738	0.9740	0.9751	0.9833	0.9972	0.9992	0.9999	1.0000	1.0000	
200 MS	0.9446	0.9451	0.9495	0.9748	0.9968	0.9992	0.9999	1.0000	1.0000	
500 MS	0.8419	0.8453	0.8718	0.9614	0.9957	0.9992	0.9999	1.0000	1.0000	
1 S	0.6543	0.6679	0.7606	0.9486	0.9948	0.9992	0.9999	1.0000	1.0000	
2 S	0.3454	0.3890	0.6345	0.9357	0.9982	0.9992	0.9999	1.0000	1.0000	
5 S	0.0360	0.1366	0.5644	0.5279	0.9922	0.9992	0.9999	1.0000	1.0000	
10 S	0.0007	0.1134	0.5606	0.9277	0.9922	0.9992	0.9999	1.0000	1.0000	

10.0, 10.5

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A CERAMIC CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-07 K01= 5.0000E-06 K02= 5.0000E-06  
DELTA= 1.0000E+00 T01= 2.4000E-05 T02= 1.1000E+00

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+06 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	10C MS	1C MS	1 MS	100 US	10 US	1 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
1 US	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9999
2 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	1.0000
5 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	1.0000
10 US	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9997	0.9998	1.0000
20 US	0.9995	0.9995	0.9995	0.9995	0.9995	0.9996	0.9996	0.9999	1.0000
50 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9996	0.9999	1.0000
100 US	0.9992	0.9992	0.9992	0.9992	0.9992	0.9993	0.9996	0.9999	1.0000
200 US	0.9990	0.9990	0.9990	0.9990	0.9990	0.9991	0.9997	0.9999	1.0000
500 US	0.9983	0.9983	0.9983	0.9983	0.9983	0.9987	0.9998	0.9999	1.0000
1 MS	0.9971	0.9971	0.9971	0.9971	0.9973	0.9983	0.9998	0.9999	1.0000
2 MS	0.9948	0.9948	0.9948	0.9948	0.9953	0.9979	0.9998	0.9999	1.0000
5 MS	0.9872	0.9872	0.9872	0.9872	0.9905	0.9977	0.9998	0.9999	1.0000
10 MS	0.9761	0.9761	0.9762	0.9773	0.9850	0.9976	0.9992	0.9999	1.0000
20 MS	0.9522	0.9522	0.9532	0.9572	0.9795	0.9976	0.9992	0.9999	1.0000
50 MS	0.8836	0.8839	0.8864	0.9076	0.9734	0.9974	0.9992	0.9999	1.0000
100 MS	0.7719	0.7729	0.7821	0.8507	0.9730	0.9975	0.9992	0.9999	1.0000
200 MS	0.5695	0.5732	0.6041	0.7076	0.9629	0.9922	0.9992	0.9999	1.0000
500 MS	0.1806	0.1936	0.2553	0.7092	0.9586	0.9922	0.9992	0.9999	1.0000
1 S	0.0146	0.0320	0.1651	0.6458	0.9473	0.9922	0.9992	0.9999	1.0000
2 S	0.0000	0.0145	0.1278	0.5912	0.9411	0.9922	0.9992	0.9999	1.0000
5 S	0.0000	0.0127	0.1140	0.5626	0.9273	0.9922	0.9992	0.9999	1.0000
10 S	0.0000	0.0126	0.1132	0.5624	0.9273	0.9922	0.9992	0.9999	1.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A CERAMIC CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-07 KC1= 6.0000E-02 K02= 5.0000E-06  
DELTA= 1.0000E+00 TD1= 2.4000E-05 TD2= 1.1000E+00

THE RADIATION PULSE IS 1.0000E+10 RAD/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+07 RAD/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	10C MS	1C MS	1 MS	100 US	10 US	1 US	
G	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 MS	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	
1 US	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9999	
2 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	0.9999	
5 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	0.9999	
10 US	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9998	0.9999	
20 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9998	0.9999	
50 US	0.9986	0.9986	0.9986	0.9986	0.9986	0.9986	0.9989	0.9998	0.9999	
100 US	0.9974	0.9974	0.9974	0.9974	0.9974	0.9976	0.9984	0.9998	0.9999	
200 US	0.9951	0.9951	0.9951	0.9951	0.9951	0.9956	0.9979	0.9998	0.9999	
500 US	0.9881	0.9881	0.9881	0.9882	0.9884	0.9907	0.9977	0.9998	0.9999	
1 MS	0.9766	0.9766	0.9766	0.9767	0.9778	0.9852	0.9977	0.9992	0.9999	
2 MS	0.9540	0.9540	0.9540	0.9544	0.9582	0.9800	0.9977	0.9992	0.9999	
5 MS	0.8888	0.8888	0.8891	0.8915	0.9121	0.9771	0.9977	0.9992	0.9999	
10 MS	0.7892	0.7893	0.7902	0.7990	0.8640	0.9767	0.9980	0.9992	0.9999	
20 MS	0.6199	0.6202	0.6233	0.6525	0.8222	0.9762	0.9922	0.9992	0.9999	
50 MS	0.2917	0.2931	0.3054	0.4123	0.7974	0.9749	0.9922	0.9992	0.9999	
100 MS	0.0756	0.0782	0.1019	0.2004	0.7824	0.9730	0.9922	0.9992	0.9999	
200 MS	0.0036	0.0067	0.0339	0.2414	0.7563	0.9739	0.9922	0.9992	0.9999	
500 MS	0.0000	0.0023	0.0229	0.1891	0.6981	0.9273	0.9922	0.9992	0.9999	
1 S	0.0000	0.0018	0.0176	0.1517	0.6418	0.9273	0.9922	0.9992	0.9999	
2 S	0.0000	0.0014	0.0142	0.1263	0.6102	0.9273	0.9922	0.9992	0.9999	
5 S	0.0000	0.0014	0.0134	0.1230	0.6727	0.9273	0.9922	0.9992	0.9999	
10 S	0.0000	0.0014	0.0179	0.1747	0.5605	0.9273	0.9922	0.9992	0.9999	

10<sup>10</sup>, 10<sup>7</sup>

**THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A CERAMIC CAPACITOR**

### THE CAPACITOR PARAMETERS USED ARE:

KP= 9.6000E-07 K01= 6.6000E-02 K02= 5.0000E-06  
DELTA= 1.0000E+00 T01= 2.4000E-05 T02= 1.1000E+00

THE RADIATION PULSE IS 1.0000+11 RADS/SEC FOR 2.5000-00 SEC FOLLOWED BY A CONSTANT RATE CF 0.0000+00 RADS/SEC

**$\tau$  IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.**

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

[illegible]

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THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A CERAMIC CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-07 KC1= 6.0000E-02 KD2= 5.0000E-06  
DELTA= 1.0000E+00 TC1= 2.0000E-05 TD2= 1.1000E+00

THE RADIATION PULSE IS 1.0000E+11 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+03 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9977
1 US	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976	0.9991
2 US	0.9975	0.9975	0.9975	0.9975	0.9975	0.9975	0.9975	0.9979	0.9996
5 US	0.9971	0.9971	0.9971	0.9971	0.9971	0.9971	0.9972	0.9981	0.9999
10 US	0.9965	0.9965	0.9965	0.9965	0.9965	0.9966	0.9968	0.9984	0.9999
20 US	0.9957	0.9957	0.9957	0.9957	0.9957	0.9958	0.9963	0.9989	0.9999
50 US	0.9946	0.9946	0.9946	0.9946	0.9946	0.9948	0.9964	0.9997	1.0000
100 US	0.9942	0.9942	0.9942	0.9942	0.9943	0.9947	0.9975	1.0000	1.0000
200 US	0.9942	0.9942	0.9942	0.9942	0.9943	0.9952	0.9991	1.0000	1.0000
500 US	0.9942	0.9942	0.9942	0.9942	0.9944	0.9964	1.0000	1.0000	1.0000
1 MS	0.9942	0.9942	0.9942	0.9942	0.9947	0.9978	1.0000	1.0000	1.0000
2 MS	0.9941	0.9941	0.9942	0.9943	0.9952	0.9992	1.0000	1.0000	1.0000
5 MS	0.9941	0.9941	0.9941	0.9944	0.9964	0.9999	1.0000	1.0000	1.0000
10 MS	0.9940	0.9940	0.9941	0.9946	0.9978	1.0000	1.0000	1.0000	1.0000
20 MS	0.9939	0.9939	0.9940	0.9950	0.9991	1.0000	1.0000	1.0000	1.0000
50 MS	0.9934	0.9935	0.9937	0.9955	0.9992	1.0000	1.0000	1.0000	1.0000
100 MS	0.9927	0.9928	0.9933	0.9969	0.9999	1.0000	1.0000	1.0000	1.0000
200 MS	0.9913	0.9915	0.9927	0.9980	0.9999	1.0000	1.0000	1.0000	1.0000
500 MS	0.9875	0.9879	0.9912	0.9987	0.9995	1.0000	1.0000	1.0000	1.0000
1 S	0.9819	0.9831	0.9903	0.9989	0.9995	1.0000	1.0000	1.0000	1.0000
2 S	0.9724	0.9756	0.9804	0.9991	0.9999	1.0000	1.0000	1.0000	1.0000
5 S	0.9487	0.9614	0.9919	0.9992	0.9999	1.0000	1.0000	1.0000	1.0000
10 S	0.9122	0.9471	0.9922	0.9992	0.9999	1.0000	1.0000	1.0000	1.0000

10", 10<sup>3</sup>



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A CERAMIC CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
KP= 9.0000E-07 K01= 6.0000E-C2 K02= 5.0000E-C6  
DELTA= 1.0000E+00 T01= 2.4000E-C5 T02= 1.1000E+00

THE RADIATION PULSE IS 1.0000E+11 RAD/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+04 RAD/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978
1 US	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976
2 US	0.9975	0.9975	0.9975	0.9975	0.9975	0.9975	0.9975
5 US	0.9971	0.9971	0.9971	0.9971	0.9971	0.9971	0.9971
10 US	0.9965	0.9965	0.9965	0.9965	0.9965	0.9965	0.9965
20 US	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957
50 US	0.9946	0.9946	0.9946	0.9946	0.9946	0.9946	0.9946
100 US	0.9942	0.9942	0.9942	0.9942	0.9942	0.9942	0.9942
200 US	0.9942	0.9942	0.9942	0.9942	0.9942	0.9942	0.9942
500 US	0.9941	0.9941	0.9941	0.9941	0.9941	0.9941	0.9941
1 MS	0.9941	0.9941	0.9941	0.9941	0.9941	0.9941	0.9941
2 MS	0.9940	0.9940	0.9940	0.9940	0.9940	0.9940	0.9940
5 MS	0.9938	0.9938	0.9938	0.9938	0.9938	0.9938	0.9938
10 MS	0.9934	0.9934	0.9934	0.9934	0.9934	0.9934	0.9934
20 MS	0.9923	0.9923	0.9923	0.9923	0.9923	0.9923	0.9923
50 MS	0.9904	0.9904	0.9904	0.9904	0.9904	0.9904	0.9904
100 MS	0.9863	0.9863	0.9863	0.9863	0.9863	0.9863	0.9863
200 MS	0.9724	0.9724	0.9724	0.9724	0.9724	0.9724	0.9724
500 MS	0.9452	0.9452	0.9452	0.9452	0.9452	0.9452	0.9452
1 S	0.8838	0.8838	0.8838	0.8838	0.8838	0.8838	0.8838
2 S	0.7036	0.7036	0.7036	0.7036	0.7036	0.7036	0.7036
5 S	0.4756	0.4756	0.4756	0.4756	0.4756	0.4756	0.4756
10 S	0.4756	0.4756	0.4756	0.4756	0.4756	0.4756	0.4756

10<sup>11</sup> 10<sup>4</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE

OF A CERAMIC CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-07 K01= 6.0000E-02 K02= 5.0000E-06  
 DELTA= 1.0000E+00 T01= 2.4000E-05 T02= 1.1000E+00

THE RADIATION PULSE IS 1.0000E+11 RADS/SEC FOR 2.5000E-08 SEC  
 FOLLOWED BY A CONSTANT RATE OF 1.0000E+05 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
 TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978
1 US	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976
2 US	0.9975	0.9975	0.9975	0.9975	0.9975	0.9975	0.9975
5 US	0.9971	0.9971	0.9971	0.9971	0.9971	0.9971	0.9971
10 US	0.9965	0.9965	0.9965	0.9965	0.9965	0.9965	0.9965
20 US	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957
50 US	0.9946	0.9946	0.9946	0.9946	0.9946	0.9946	0.9946
100 US	0.9942	0.9942	0.9942	0.9942	0.9942	0.9942	0.9942
200 US	0.9941	0.9941	0.9941	0.9941	0.9941	0.9941	0.9941
500 US	0.9940	0.9940	0.9940	0.9940	0.9940	0.9940	0.9940
1 MS	0.9939	0.9939	0.9939	0.9939	0.9939	0.9939	0.9939
2 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
5 MS	0.9929	0.9929	0.9929	0.9929	0.9929	0.9929	0.9929
10 MS	0.9917	0.9917	0.9917	0.9917	0.9917	0.9917	0.9917
20 MS	0.9892	0.9892	0.9892	0.9892	0.9892	0.9892	0.9892
50 MS	0.9814	0.9814	0.9814	0.9814	0.9814	0.9814	0.9814
100 MS	0.9677	0.9677	0.9677	0.9677	0.9677	0.9677	0.9677
200 MS	0.9377	0.9377	0.9377	0.9377	0.9377	0.9377	0.9377
500 MS	0.8337	0.8337	0.8337	0.8337	0.8337	0.8337	0.8337
1 S	0.6461	0.6461	0.6461	0.6461	0.6461	0.6461	0.6461
2 S	0.3401	0.3401	0.3401	0.3401	0.3401	0.3401	0.3401
5 S	0.0354	0.0354	0.0354	0.0354	0.0354	0.0354	0.0354
10 S	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007

10<sup>5</sup>



**THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A CERAMIC CAPACITOR**

## THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-07 K01= 6.0000E-02 K02= 5.0000E-06  
DELTA= 1.0000E+00 T01= 2.4000E-05 T02= 1.1000E+00

THE RADIATION PULSE IS 1.0000E+11 RADS/SEC FOR 2.5000E-08 SEC FOLLOWED BY A CONSTANT RATE CF 1.0000E+06 RADS/SEC

**$\tau$  IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.**

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						1 MS	100 US	10 US	1 US
	INF	10 SEC	1 SEC	10C MS	1C MS					
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9977
1 US	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976	0.9991
2 US	0.9975	0.9975	0.9975	0.9975	0.9975	0.9975	0.9975	0.9975	0.9979	0.9996
5 US	0.9971	0.9971	0.9971	0.9971	0.9971	0.9971	0.9971	0.9972	0.9981	0.9999
10 US	0.9965	0.9965	0.9965	0.9965	0.9965	0.9965	0.9965	0.9968	0.9984	0.9999
20 US	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9958	0.9963	0.9989	0.9999
50 US	0.9945	0.9945	0.9945	0.9945	0.9945	0.9945	0.9947	0.9963	0.9997	1.0000
100 US	0.9940	0.9940	0.9940	0.9940	0.9941	0.9941	0.9945	0.9974	0.9999	1.0000
200 US	0.9937	0.9937	0.9937	0.9937	0.9938	0.9938	0.9948	0.9989	0.9999	1.0000
500 US	0.9930	0.9930	0.9930	0.9931	0.9933	0.9933	0.9955	0.9992	0.9999	1.0000
1 MS	0.9919	0.9919	0.9919	0.9919	0.9925	0.9925	0.9964	0.9992	0.9999	1.0000
2 MS	0.9895	0.9895	0.9895	0.9897	0.9910	0.9910	0.9972	0.9992	0.9999	1.0000
5 MS	0.9825	0.9825	0.9826	0.9831	0.9873	0.9873	0.9976	0.9992	0.9999	1.0000
10 MS	0.9708	0.9709	0.9710	0.9725	0.9830	0.9830	0.9976	0.9992	0.9999	1.0000
20 MS	0.9476	0.9476	0.9481	0.9529	0.9787	0.9787	0.9976	0.9992	0.9999	1.0000
50 MS	0.8785	0.8789	0.9215	0.9044	0.9752	0.9752	0.9974	0.9992	0.9999	1.0000
100 MS	0.7670	0.7681	0.7777	0.8496	0.9729	0.9729	0.9975	0.9992	0.9999	1.0000
200 MS	0.5654	0.5691	0.6006	0.7846	0.9688	0.9688	0.9922	0.9992	0.9999	1.0000
500 MS	0.1789	0.1919	0.2950	0.7082	0.9586	0.9586	0.9922	0.9992	0.9999	1.0000
1 S	0.0144	0.0318	0.1649	0.6456	0.9473	0.9473	0.9922	0.9992	0.9999	1.0000
2 S	0.0000	0.0145	0.1277	0.5912	0.9411	0.9411	0.9922	0.9992	0.9999	1.0000
5 S	0.0000	0.0127	0.1140	0.5626	0.9273	0.9273	0.9922	0.9992	0.9999	1.0000
10 S	0.0000	0.0126	0.1132	0.5624	0.9273	0.9273	0.9922	0.9992	0.9999	1.0000

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THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A CERAMIC CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-07 KD1= 6.0000E-02 KD2= 5.0000E-06  
DELTA= 1.0000E+00 TD1= 2.4000E-05 TD2= 1.1000E+00

THE RADIATION PULSE IS 1.0000E+11 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+07 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	1 MS	100 US	10 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978
1 US	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976
2 US	0.9974	0.9974	0.9974	0.9974	0.9975	0.9975	0.9979
5 US	0.9970	0.9970	0.9970	0.9970	0.9970	0.9972	0.9981
10 US	0.9964	0.9964	0.9964	0.9964	0.9964	0.9967	0.9983
20 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9961	0.9988
50 US	0.9938	0.9938	0.9938	0.9938	0.9940	0.9957	0.9992
100 US	0.9922	0.9922	0.9922	0.9922	0.9928	0.9962	0.9992
200 US	0.9899	0.9899	0.9899	0.9899	0.9912	0.9971	0.9992
500 US	0.9829	0.9829	0.9829	0.9830	0.9875	0.9976	0.9992
1 MS	0.9715	0.9715	0.9715	0.9716	0.9731	0.9977	0.9992
2 MS	0.9489	0.9489	0.9490	0.9495	0.9793	0.9977	0.9992
5 MS	0.8841	0.8841	0.8844	0.8870	0.9770	0.9977	0.9992
10 MS	0.7850	0.7851	0.7860	0.7951	0.9767	0.9980	0.9992
20 MS	0.6165	0.6169	0.6200	0.6497	0.9762	0.9992	0.9992
50 MS	0.2901	0.2915	0.3038	0.4112	0.9749	0.9992	0.9992
100 MS	0.0751	0.0778	0.1014	0.2601	0.9730	0.9992	0.9992
200 MS	0.0036	0.0067	0.0339	0.2413	0.9739	0.9992	0.9992
500 MS	0.0000	0.0023	0.0229	0.1291	0.9273	0.9992	0.9992
1 S	0.0000	0.0018	0.0176	0.1517	0.9273	0.9992	0.9992
2 S	0.0000	0.0014	0.0142	0.1263	0.9273	0.9992	0.9992
5 S	0.0000	0.0014	0.0134	0.1230	0.9273	0.9992	0.9992
10 S	0.0000	0.0018	0.0179	0.1747	0.9273	0.9992	0.9992

10<sup>11</sup>, 10<sup>7</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A CERAMIC CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-07 K01= 6.0000E-02 K02= 5.0000E-06  
DELTA= 1.0000E+00 TC1= 2.4000E-05 TC2= 1.1000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 0.0000E+00 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US
10 US	1.0000	0.9777	0.9777	1.0000	1.0000	1.0000	1.0000
20 US	0.9777	0.9777	0.9777	0.9777	0.9777	0.9777	0.9777
30 US	0.9763	0.9763	0.9763	0.9763	0.9763	0.9763	0.9763
40 US	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750
50 US	0.9712	0.9712	0.9712	0.9712	0.9712	0.9712	0.9712
60 US	0.9659	0.9659	0.9659	0.9659	0.9659	0.9659	0.9659
70 US	0.9581	0.9581	0.9581	0.9581	0.9581	0.9581	0.9581
80 US	0.9474	0.9474	0.9474	0.9474	0.9474	0.9474	0.9474
90 US	0.9437	0.9437	0.9437	0.9437	0.9437	0.9437	0.9437
100 US	0.9432	0.9432	0.9432	0.9432	0.9432	0.9432	0.9432
200 US	0.9431	0.9431	0.9431	0.9431	0.9431	0.9431	0.9431
300 US	0.9431	0.9431	0.9431	0.9431	0.9431	0.9431	0.9431
400 US	0.9426	0.9426	0.9426	0.9426	0.9426	0.9426	0.9426
500 US	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420
1 MS	0.9374	0.9374	0.9374	0.9374	0.9374	0.9374	0.9374
2 MS	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320
3 MS	0.9219	0.9219	0.9219	0.9219	0.9219	0.9219	0.9219
4 MS	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970
5 MS	0.8628	0.8628	0.8628	0.8628	0.8628	0.8628	0.8628
10 MS	0.8406	0.8406	0.8406	0.8406	0.8406	0.8406	0.8406
20 MS	0.8232	0.8232	0.8232	0.8232	0.8232	0.8232	0.8232
30 MS	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220
40 MS	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220
50 MS	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220
100 MS	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220
200 MS	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220
300 MS	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220
400 MS	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220
500 MS	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220
1 S	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220
2 S	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220
3 S	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220
4 S	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220
5 S	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220
10 S	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220	0.8220

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE

OF A CERAMIC CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-07 K01= 5.0000E-02 K02= 5.0000E-06  
 DELTA= 1.0000E+00 TR1= 2.4000E-05 TD2= 1.1000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
 FOLLOWED BY A CONSTANT RATE CF 1.0000E+03 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
 TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	10C MS	1C MS	1 MS	100 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9777	0.9777	0.9777	0.9777	0.9777	0.9777	0.9777
1 US	0.9763	0.9763	0.9763	0.9764	0.9764	0.9764	0.9765
2 US	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9752
5 US	0.9712	0.9712	0.9712	0.9712	0.9712	0.9713	0.9813
10 US	0.9659	0.9659	0.9659	0.9659	0.9659	0.9661	0.9845
20 US	0.9581	0.9581	0.9581	0.9581	0.9581	0.9587	0.9894
50 US	0.9474	0.9474	0.9474	0.9474	0.9476	0.9495	0.9968
100 US	0.9437	0.9437	0.9437	0.9438	0.9442	0.9483	0.9996
200 US	0.9432	0.9432	0.9432	0.9433	0.9442	0.9528	1.0000
500 US	0.9431	0.9431	0.9432	0.9434	0.9458	0.9650	1.0000
1 MS	0.9431	0.9431	0.9431	0.9436	0.9484	0.9787	1.0000
2 MS	0.9430	0.9430	0.9431	0.9441	0.9532	0.9921	1.0000
5 MS	0.9426	0.9426	0.9429	0.9454	0.9650	0.9995	1.0000
10 MS	0.9420	0.9421	0.9426	0.9475	0.9783	0.9999	1.0000
20 MS	0.9408	0.9409	0.9420	0.9513	0.9912	0.9999	1.0000
50 MS	0.9373	0.9375	0.9402	0.9609	0.9984	0.9999	1.0000
100 MS	0.9317	0.9324	0.9377	0.9717	0.9988	1.0000	1.0000
200 MS	0.9214	0.9227	0.9336	0.9827	0.9989	1.0000	1.0000
500 MS	0.8955	0.8994	0.9281	0.9907	0.9992	1.0000	1.0000
1 S	0.8652	0.8746	0.9316	0.9940	0.9998	1.0000	1.0000
2 S	0.8317	0.8543	0.9527	0.9971	0.9999	1.0000	1.0000
5 S	0.7963	0.8609	0.9871	0.9991	0.9996	1.0000	1.0000
10 S	0.7647	0.8878	0.9921	0.9992	0.9999	1.0000	1.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A CERAMIC CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-07 K01= 4.0000E-02 K02= 5.0000E-06  
DELTA= 1.0000E+00 T01= 2.4000E-05 T02= 1.1000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+04 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9777	0.9777	0.9777	0.9777	0.9777	0.9777	0.9777
1 US	0.9763	0.9763	0.9763	0.9764	0.9764	0.9764	0.9765
2 US	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9752
5 US	0.9712	0.9712	0.9712	0.9712	0.9712	0.9713	0.9813
10 US	0.9659	0.9659	0.9659	0.9659	0.9659	0.9661	0.9845
20 US	0.9581	0.9581	0.9581	0.9581	0.9581	0.9587	0.9894
50 US	0.9474	0.9474	0.9474	0.9474	0.9476	0.9495	0.9968
100 US	0.9437	0.9437	0.9437	0.9438	0.9442	0.9483	0.9996
200 US	0.9432	0.9432	0.9432	0.9433	0.9442	0.9528	1.0000
500 US	0.9431	0.9431	0.9432	0.9434	0.9458	0.9650	1.0000
1 MS	0.9431	0.9431	0.9431	0.9436	0.9484	0.9787	1.0000
2 MS	0.9429	0.9429	0.9430	0.9440	0.9532	0.9921	1.0000
5 MS	0.9425	0.9425	0.9428	0.9453	0.9650	0.9995	1.0000
10 MS	0.9418	0.9419	0.9424	0.9473	0.9782	0.9998	1.0000
20 MS	0.9404	0.9405	0.9416	0.9510	0.9911	0.9999	1.0000
50 MS	0.9363	0.9366	0.9392	0.9600	0.9982	0.9999	1.0000
100 MS	0.9296	0.9302	0.9356	0.9703	0.9986	0.9999	1.0000
200 MS	0.9167	0.9181	0.9294	0.9805	0.9986	0.9999	1.0000
500 MS	0.8818	0.8860	0.9168	0.9872	0.9988	0.9999	1.0000
1 S	0.8329	0.8435	0.9088	0.9892	0.9992	0.9999	1.0000
2 S	0.7559	0.7836	0.9115	0.9910	0.9992	0.9999	1.0000
5 S	0.5906	0.6851	0.9251	0.9522	0.9992	0.9999	1.0000
10 S	0.3987	0.6113	0.9273	0.9922	0.9992	0.9999	1.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A CERAMIC CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-07 K01= 4.0000E-02 K02= 5.0000E-06  
DELTA= 1.0000E+00 T01= 2.0000E-05 T02= 1.1000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+05 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	1 MS	100 US	10 US
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9777	0.9777	0.9777	0.9777	0.9777	0.9778	0.9779
1 US	0.9763	0.9763	0.9763	0.9764	0.9764	0.9766	0.9783
2 US	0.9750	0.9750	0.9750	0.9750	0.9750	0.9754	0.9792
5 US	0.9712	0.9712	0.9712	0.9712	0.9713	0.9724	0.9813
10 US	0.9659	0.9659	0.9659	0.9659	0.9661	0.9686	0.9845
20 US	0.9581	0.9581	0.9581	0.9581	0.9587	0.9642	0.9894
50 US	0.9474	0.9474	0.9474	0.9474	0.9495	0.9644	0.9968
100 US	0.9437	0.9437	0.9437	0.9442	0.9483	0.9757	0.9996
200 US	0.9431	0.9431	0.9431	0.9442	0.9527	0.9908	1.0000
500 US	0.9430	0.9430	0.9431	0.9457	0.9649	0.9995	1.0000
1 MS	0.9429	0.9429	0.9429	0.9482	0.9786	0.9999	1.0000
2 MS	0.9425	0.9425	0.9426	0.9528	0.9919	0.9999	1.0000
5 MS	0.9415	0.9415	0.9418	0.9642	0.9992	0.9999	1.0000
10 MS	0.9398	0.9399	0.9404	0.9769	0.9992	0.9999	1.0000
20 MS	0.9364	0.9365	0.9376	0.9892	0.9992	0.9999	1.0000
50 MS	0.9260	0.9263	0.9291	0.9922	0.9992	0.9999	1.0000
100 MS	0.9082	0.9070	0.9152	0.9922	0.9992	0.9999	1.0000
200 MS	0.8715	0.8732	0.8878	0.9922	0.9992	0.9999	1.0000
500 MS	0.7560	0.7626	0.8125	0.9922	0.9992	0.9999	1.0000
1 S	0.5693	0.5884	0.7143	0.9922	0.9992	0.9999	1.0000
2 S	0.2909	0.3412	0.6167	0.9922	0.9992	0.9999	1.0000
5 S	0.0297	0.1320	0.5635	0.9922	0.9992	0.9999	1.0000
10 S	0.0006	0.1134	0.5406	0.9922	0.9992	0.9999	1.0000

10<sup>12</sup>, 10<sup>5</sup>



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A CERAMIC CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
KP= 9.0000E-07 KC1= 6.0000E-02 KD2= 5.0000E-06  
DELTA= 1.0000E+00 TD1= 2.4000E-05 TD2= 1.1000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+06 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9777	0.9777	0.9777	0.9777	0.9777	0.9777	0.9778	0.9778	0.9779
1 US	0.9763	0.9763	0.9763	0.9763	0.9764	0.9764	0.9766	0.9785	0.9908
2 US	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9754	0.9792	0.9957
5 US	0.9712	0.9712	0.9712	0.9712	0.9712	0.9713	0.9724	0.9813	0.9986
10 US	0.9658	0.9658	0.9658	0.9658	0.9659	0.9661	0.9686	0.9845	0.9990
20 US	0.9580	0.9580	0.9580	0.9581	0.9581	0.9587	0.9641	0.9894	0.9993
50 US	0.9473	0.9473	0.9473	0.9474	0.9476	0.9494	0.9644	0.9968	0.9998
100 US	0.9435	0.9435	0.9435	0.9436	0.9440	0.9482	0.9756	0.9996	1.0000
200 US	0.9428	0.9428	0.9428	0.9429	0.9438	0.9524	0.9906	0.9999	1.0000
500 US	0.9421	0.9421	0.9421	0.9423	0.9448	0.9641	0.9992	0.9999	1.0000
1 MS	0.9409	0.9409	0.9410	0.9415	0.9463	0.9773	0.9992	0.9999	1.0000
2 MS	0.9386	0.9386	0.9387	0.9397	0.9492	0.9901	0.9992	0.9999	1.0000
5 MS	0.9316	0.9316	0.9319	0.9346	0.9563	0.9922	0.9992	0.9999	1.0000
10 MS	0.9200	0.9201	0.9207	0.9265	0.9640	0.9922	0.9992	0.9999	1.0000
20 MS	0.8970	0.8971	0.8985	0.9113	0.9712	0.9922	0.9992	0.9999	1.0000
50 MS	0.8289	0.8294	0.8342	0.8734	0.9739	0.9922	0.9992	0.9999	1.0000
100 MS	0.7199	0.7214	0.7346	0.8289	0.9719	0.9922	0.9992	0.9999	1.0000
200 MS	0.5254	0.5298	0.5667	0.7770	0.9679	0.9922	0.9992	0.9999	1.0000
500 MS	0.1622	0.1757	0.2825	0.7049	0.9579	0.9922	0.9992	0.9999	1.0000
1 S	0.0127	0.0301	0.1629	0.6436	0.9469	0.9922	0.9992	0.9999	1.0000
2 S	0.0000	0.0144	0.1274	0.5911	0.9409	0.9922	0.9992	0.9999	1.0000
5 S	0.0000	0.0127	0.1139	0.5626	0.9273	0.9922	0.9992	0.9999	1.0000
10 S	0.0000	0.0126	0.1132	0.5624	0.9273	0.9922	0.9992	0.9999	1.0000



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A CERAMIC CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-07 KC1= 6.0000E-C2 KD2= 5.0000E-06  
DELTA= 1.0000E+00 TD1= 2.4000E-C5 TD2= 1.1000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08. SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+07 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9777	0.9777	0.9777	0.9777	0.9777	0.9777	0.9778	0.9778	0.9779
1 US	0.9763	0.9763	0.9763	0.9763	0.9763	0.9764	0.9766	0.9785	0.9908
2 US	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9754	0.9792	0.9957
5 US	0.9711	0.9711	0.9711	0.9711	0.9711	0.9713	0.9724	0.9813	0.9986
10 US	0.9657	0.9657	0.9657	0.9657	0.9658	0.9660	0.9685	0.9844	0.9990
20 US	0.9578	0.9578	0.9578	0.9578	0.9579	0.9585	0.9639	0.9893	0.9993
50 US	0.9466	0.9466	0.9466	0.9466	0.9468	0.9487	0.9638	0.9966	0.9998
100 US	0.9418	0.9418	0.9418	0.9419	0.9423	0.9465	0.9744	0.9992	0.9999
200 US	0.9391	0.9391	0.9391	0.9392	0.9402	0.9490	0.9889	0.9992	0.9999
500 US	0.9325	0.9325	0.9325	0.9328	0.9354	0.9564	0.9922	0.9992	0.9999
1 MS	0.9216	0.9216	0.9216	0.9222	0.9276	0.9647	0.9922	0.9992	0.9999
2 MS	0.9001	0.9001	0.9002	0.9016	0.9141	0.9725	0.9922	0.9992	0.9999
5 MS	0.8383	0.8383	0.8388	0.8434	0.8813	0.9766	0.9922	0.9992	0.9999
10 MS	0.7439	0.7440	0.7453	0.7579	0.8470	0.9766	0.9922	0.9992	0.9999
20 MS	0.5836	0.5840	0.5877	0.6227	0.8167	0.9761	0.9922	0.9992	0.9999
50 MS	0.2737	0.2751	0.2882	0.4008	0.7966	0.9748	0.9922	0.9992	0.9999
100 MS	0.0705	0.0732	0.0972	0.2877	0.7817	0.9729	0.9922	0.9992	0.9999
200 MS	0.0033	0.0064	0.0336	0.2407	0.7557	0.9738	0.9922	0.9992	0.9999
500 MS	0.0000	0.0023	0.0228	0.1888	0.6977	0.9273	0.9922	0.9992	0.9999
1 S	0.0000	0.0019	0.0176	0.1516	0.6416	0.9273	0.9922	0.9992	0.9999
2 S	0.0000	0.0014	0.0142	0.1262	0.6101	0.9273	0.9922	0.9992	0.9999
5 S	0.0000	0.0014	0.0134	0.1230	0.6101	0.9273	0.9922	0.9992	0.9999
10 S	0.0000	0.0019	0.0179	0.1747	0.5605	0.9273	0.9922	0.9992	0.9999

10<sup>12</sup>, 10<sup>7</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A CERAMIC CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.00000-07 KD1= 5.00000-02 KD2= 5.00000-06  
DELTA= 1.00000+00 TC1= 2.40000-05 TD2= 1.10000+00

THE RADIATION PULSE IS 1.00000+13 RADS/SEC FOR 2.50000-00 SEC  
FOLLOWED BY A CONSTANT RATE CF 0.00000+00 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7987	0.8005
1 US	0.7871	0.7871	0.7871	0.7871	0.7872	0.7873	0.7892	0.8065	0.9170
2 US	0.7761	0.7761	0.7761	0.7761	0.7762	0.7765	0.7803	0.8141	0.9611
5 US	0.7465	0.7465	0.7465	0.7465	0.7466	0.7476	0.7573	0.8347	0.9863
10 US	0.7065	0.7065	0.7065	0.7066	0.7068	0.7089	0.7294	0.8634	0.9898
20 US	0.6516	0.6516	0.6516	0.6517	0.6521	0.6569	0.7004	0.9059	0.9932
50 US	0.5827	0.5827	0.5827	0.5829	0.5843	0.5984	0.7128	0.9701	0.9981
100 US	0.5603	0.5603	0.5603	0.5606	0.5639	0.5954	0.8046	0.9960	1.0000
200 US	0.5571	0.5571	0.5572	0.5579	0.5651	0.6308	0.9259	0.9999	1.0000
500 US	0.5569	0.5569	0.5571	0.5590	0.5777	0.7263	0.9962	1.0000	1.0000
1 MS	0.5565	0.5565	0.5569	0.5608	0.5980	0.8337	0.9999	1.0000	1.0000
2 MS	0.5558	0.5559	0.5567	0.5645	0.6355	0.9382	0.9999	1.0000	1.0000
5 MS	0.5537	0.5540	0.5559	0.5753	0.7279	0.9958	0.9999	1.0000	1.0000
10 MS	0.5503	0.5508	0.5547	0.5925	0.8312	0.9987	1.0000	1.0000	1.0000
20 MS	0.5436	0.5445	0.5524	0.6241	0.9309	0.9988	1.0000	1.0000	1.0000
50 MS	0.5242	0.5264	0.5459	0.7007	0.9854	0.9998	1.0000	1.0000	1.0000
100 MS	0.4944	0.4989	0.5373	0.7841	0.9884	0.9992	1.0000	1.0000	1.0000
200 MS	0.4433	0.4523	0.5262	0.8633	0.9896	1.0000	1.0000	1.0000	1.0000
500 MS	0.3372	0.3599	0.5262	0.9190	0.9921	1.0000	1.0000	1.0000	1.0000
1 S	0.2451	0.2912	0.5775	0.9478	0.9953	1.0000	1.0000	1.0000	1.0000
2 S	0.1761	0.2725	0.7187	0.9782	1.0000	1.0000	1.0000	1.0000	1.0000
5 S	0.1429	0.4090	0.9557	0.9986	1.0000	1.0000	1.0000	1.0000	1.0000
10 S	0.1409	0.6370	0.9991	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

# THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE OF A CERAMIC CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-07 K01= 6.0000E-02 K02= 5.0000E-06  
DELTA= 1.0000E+00 T01= 2.4000E-05 T02= 1.1000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08. SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+03 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 MS	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7987	0.8005	
1 US	0.7871	0.7871	0.7871	0.7871	0.7872	0.7873	0.7892	0.8065	0.9170	
2 US	0.7761	0.7761	0.7761	0.7761	0.7762	0.7765	0.7803	0.8141	0.9611	
5 US	0.7465	0.7465	0.7465	0.7465	0.7466	0.7476	0.7573	0.8347	0.9863	
10 US	0.7065	0.7065	0.7065	0.7066	0.7068	0.7089	0.7294	0.8634	0.9898	
20 US	0.6516	0.6516	0.6516	0.6517	0.6521	0.6569	0.7004	0.9059	0.9932	
50 US	0.5827	0.5827	0.5827	0.5829	0.5843	0.5984	0.7128	0.9701	0.9981	
100 US	0.5603	0.5603	0.5603	0.5606	0.5639	0.5954	0.8046	0.9960	1.0000	
200 US	0.5571	0.5571	0.5572	0.5579	0.5651	0.6308	0.9259	0.9999	1.0000	
500 US	0.5569	0.5569	0.5571	0.5590	0.5777	0.7263	0.9562	1.0000	1.0000	
1 MS	0.5565	0.5565	0.5569	0.5608	0.5980	0.8337	0.9999	1.0000	1.0000	
2 MS	0.5558	0.5559	0.5567	0.5645	0.6355	0.9382	0.9999	1.0000	1.0000	
5 MS	0.5537	0.5540	0.5559	0.5753	0.7279	0.9958	0.9999	1.0000	1.0000	
10 MS	0.5503	0.5507	0.5547	0.5925	0.8312	0.9987	1.0000	1.0000	1.0000	
20 MS	0.5435	0.5444	0.5523	0.6241	0.9309	0.9988	1.0000	1.0000	1.0000	
50 MS	0.5241	0.5263	0.5459	0.7006	0.9853	0.9988	1.0000	1.0000	1.0000	
100 MS	0.4943	0.4948	0.5371	0.7840	0.9886	0.9992	1.0000	1.0000	1.0000	
200 MS	0.4431	0.4521	0.5259	0.8631	0.9896	1.0000	1.0000	1.0000	1.0000	
500 MS	0.3366	0.3593	0.5256	0.9187	0.9920	1.0000	1.0000	1.0000	1.0000	
1 S	0.2441	0.2901	0.5762	0.9473	0.9952	1.0000	1.0000	1.0000	1.0000	
2 S	0.1742	0.2704	0.7159	0.9776	0.9999	1.0000	1.0000	1.0000	1.0000	
5 S	0.1383	0.4015	0.9491	0.9976	0.9999	1.0000	1.0000	1.0000	1.0000	
10 S	0.1310	0.6163	0.9514	0.9992	0.9999	1.0000	1.0000	1.0000	1.0000	

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A CERAMIC CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
KP= 9.00000E-07 KD1= 6.00000E-02 KD2= 5.00000E-06  
DELTA= 1.00000E+00 TD1= 2.40000E-05 TD2= 1.10000E+00

THE RADIATION PULSE IS 1.00000E+13 RADS/SEC FOR 1.50000E-04 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.00000E+04 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US
10 US	1.0000	0.7985	0.7985	1.0000	1.0000	1.0000	1.0000
20 US	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985
30 US	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985
40 US	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985
50 US	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985
100 US	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985
200 US	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985
500 US	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985
1 MS	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985
2 MS	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985
5 MS	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985
10 MS	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985
20 MS	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985
50 MS	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985
100 MS	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985
200 MS	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985
500 MS	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985
1 S	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985
2 S	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985
5 S	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985
10 S	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE

OF A CERAMIC CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-07 K01= 6.0000E-02 K02= 5.0000E-06  
DELTA= 1.0000E+00 T01= 2.4000E-05 T02= 1.1000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+05 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	10C MS	1C MS	1 MS	100 US
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7987
1 US	0.7871	0.7871	0.7871	0.7872	0.7873	0.7873	0.8065
2 US	0.7761	0.7761	0.7761	0.7762	0.7765	0.7765	0.8141
3 US	0.7465	0.7465	0.7465	0.7466	0.7476	0.7476	0.8347
1C US	0.7065	0.7065	0.7065	0.7068	0.7089	0.7089	0.8634
2C US	0.6516	0.6516	0.6516	0.6521	0.6569	0.6569	0.9059
50 US	0.5827	0.5827	0.5827	0.5843	0.5984	0.5984	0.9701
10C US	0.5602	0.5602	0.5603	0.5639	0.5954	0.5954	0.9960
20C US	0.5571	0.5571	0.5572	0.5651	0.6308	0.6308	0.9999
50C US	0.5568	0.5568	0.5570	0.5777	0.7263	0.7263	1.0000
1 MS	0.5564	0.5564	0.5568	0.5979	0.8336	0.8336	1.0000
2 MS	0.5556	0.5556	0.5564	0.6353	0.9380	0.9380	1.0000
5 MS	0.5531	0.5533	0.5553	0.7273	0.9955	0.9955	1.0000
1C MS	0.549C	0.5495	0.5534	0.8301	0.9985	0.9985	1.0000
2C MS	0.5410	0.5419	0.5498	0.9292	0.9985	0.9999	1.0000
5C MS	0.5178	0.5200	0.5395	0.9829	0.9986	0.9999	1.0000
10C MS	0.4818	0.4863	0.5247	0.9859	0.9989	0.9999	1.0000
20C MS	0.4191	0.4281	0.5C19	0.9865	0.9992	0.9999	1.0000
50C MS	0.2842	0.3063	0.4697	0.9878	0.9992	0.9999	1.0000
1 S	0.1806	0.2022	0.4700	0.9898	0.9992	0.9999	1.0000
2 S	0.0809	0.1316	0.5C91	0.9922	0.9992	0.9999	1.0000
5 S	0.0052	0.1114	0.5560	0.9922	0.9992	0.9999	1.0000
1C S	0.0001	0.1131	0.5605	0.9922	0.9992	0.9999	1.0000

10<sup>-4</sup>, 10<sup>-5</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A CERAMIC CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-07 K01= 6.0000E-02 K02= 5.0000E-06  
DELTA= 1.0000E+00 T01= 2.4000E-05 T02= 1.1000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+06 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7987	0.8005
1 US	0.7871	0.7871	0.7871	0.7871	0.7872	0.7873	0.7892	0.8065	0.9170
2 US	0.7761	0.7761	0.7761	0.7761	0.7762	0.7765	0.7803	0.8141	0.9611
5 US	0.7465	0.7465	0.7465	0.7465	0.7466	0.7476	0.7573	0.8347	0.9863
10 US	0.7065	0.7065	0.7065	0.7065	0.7068	0.7089	0.7293	0.8634	0.9898
20 US	0.6516	0.6516	0.6516	0.6516	0.6521	0.6569	0.7004	0.9059	0.9932
50 US	0.5827	0.5827	0.5827	0.5828	0.5843	0.5983	0.7128	0.9701	0.9981
100 US	0.5601	0.5601	0.5602	0.5605	0.5638	0.5953	0.8046	0.9960	1.0000
200 US	0.5569	0.5569	0.5569	0.5577	0.5649	0.6306	0.9258	0.9999	1.0000
500 US	0.5562	0.5562	0.5564	0.5584	0.5771	0.7257	0.9960	0.9999	1.0000
1 MS	0.5552	0.5553	0.5557	0.5594	0.5967	0.8326	0.9992	0.9999	1.0000
2 MS	0.5532	0.5533	0.5541	0.5605	0.6330	0.9364	0.9992	0.9999	1.0000
5 MS	0.5473	0.5475	0.5495	0.5605	0.7219	0.9922	0.9992	0.9999	1.0000
10 MS	0.5375	0.5379	0.5419	0.5605	0.8203	0.9922	0.9992	0.9999	1.0000
20 MS	0.5182	0.5191	0.5271	0.5605	0.9136	0.9922	0.9992	0.9999	1.0000
50 MS	0.4634	0.4657	0.4854	0.5605	0.9273	0.9922	0.9992	0.9999	1.0000
100 MS	0.3819	0.3864	0.4248	0.5605	0.9273	0.9922	0.9992	0.9999	1.0000
200 MS	0.2527	0.2612	0.3323	0.5605	0.9273	0.9922	0.9992	0.9999	1.0000
500 MS	0.0610	0.0767	0.1537	0.5605	0.9273	0.9922	0.9992	0.9999	1.0000
1 S	0.0036	0.0201	0.1468	0.5605	0.9273	0.9922	0.9992	0.9999	1.0000
2 S	0.0000	0.0140	0.1241	0.5605	0.9273	0.9922	0.9992	0.9999	1.0000
5 S	0.0000	0.0127	0.1138	0.5605	0.9273	0.9922	0.9992	0.9999	1.0000
10 S	0.0000	0.0126	0.1132	0.5605	0.9273	0.9922	0.9992	0.9999	1.0000



**THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A CERAMIC CAPACITOR**

### THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000-07 K01= 6.0000-02 K02= 5.0000-06  
DELYA= 1.0000+00 T01= 2.4000-05 T02= 1.1000+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+07 RADS/SEC

**TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.**

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)					1 MS	10 MS	100 US	10 US	1 US
	INF	10 SEC	1 SEC	100 MS	1 MS					
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.7985	0.7985	C.7985	C.7985	0.7985	0.7985	0.7985	0.7985	0.7987	0.8005
1 US	0.7871	0.7871	0.7871	C.7871	0.7872	0.7873	0.7892	0.8065	0.8065	0.9170
2 US	0.7761	0.7761	C.7761	C.7761	0.7762	0.7765	0.7802	0.8141	0.8141	0.9611
5 US	0.7464	0.7464	C.7464	C.7465	0.7466	0.7475	0.7573	0.8347	0.8347	0.9863
10 US	0.7064	0.7064	C.7064	C.7065	0.7067	0.7088	0.7293	0.8633	0.8633	0.9898
20 US	0.6514	0.6514	C.6514	C.6515	0.6520	0.6567	0.7003	0.9058	0.9058	0.9932
50 US	0.5822	0.5822	C.5822	C.5824	0.5838	0.5979	0.7124	0.9699	0.9699	0.9981
100 US	0.5591	0.5591	C.5592	C.5595	0.5628	0.5943	0.8037	0.9958	0.9958	0.9999
200 US	0.5547	0.5547	0.5548	C.5555	C.5627	0.6285	0.9243	0.9992	0.9992	0.9999
500 US	0.5506	0.5506	0.5508	C.5527	C.5715	0.7205	0.9922	0.9992	0.9992	0.9999
1 MS	0.5439	0.5439	0.5442	C.5482	C.5854	0.8230	0.9922	0.9992	0.9992	0.9999
2 MS	0.5306	0.5306	C.5314	C.5393	0.6108	0.9211	0.9922	0.9992	0.9992	0.9999
5 MS	0.4925	0.4927	C.4947	C.5143	0.6703	0.9273	0.9922	0.9992	0.9992	0.9999
10 MS	0.4350	0.4350	C.4390	C.4776	0.7306	0.9273	0.9922	0.9992	0.9992	0.9999
20 MS	0.3372	0.3381	C.3460	C.4195	0.7783	0.9273	0.9922	0.9992	0.9992	0.9999
50 MS	0.1530	0.1550	C.1728	C.3231	0.7890	0.9273	0.9922	0.9992	0.9992	0.9999
100 MS	0.0374	0.0403	C.0462	C.2689	0.7754	0.9273	0.9922	0.9992	0.9992	0.9999
200 MS	0.0016	0.0047	C.0313	C.2345	0.7503	0.9273	0.9922	0.9992	0.9992	0.9999
500 MS	0.0000	0.0023	C.0224	C.1863	0.6942	0.9273	0.9922	0.9992	0.9992	0.9999
1 S	0.0000	0.0018	0.0174	C.1505	0.6397	0.9273	0.9922	0.9992	0.9992	0.9999
2 S	0.0000	0.0014	0.0142	C.1259	0.6095	0.9273	0.9922	0.9992	0.9992	0.9999
5 S	0.0000	0.0014	C.0134	C.1230	0.6727	0.9273	0.9922	0.9992	0.9992	0.9999
10 S	0.0000	0.0018	0.0179	C.1747	C.5605	0.9273	0.9922	0.9992	0.9992	0.9999

 $10^{13}, 10^7$



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-06 KD1= 9.0000E-C2 KD2= 9.0000E-C7  
DELTA= 1.0000E+00 T01= 7.0000E-C4 T02= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 0.0000E+00 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9977
1 US	0.9977	0.9977	0.9977	0.9977	0.9977	0.9977	0.9978	0.9979	0.9991
2 US	0.9977	0.9977	0.9977	0.9977	0.9977	0.9977	0.9978	0.9981	0.9997
5 US	0.9976	0.9976	0.9976	0.9976	0.9976	0.9977	0.9978	0.9986	1.0000
10 US	0.9975	0.9975	0.9975	0.9975	0.9975	0.9976	0.9978	0.9990	1.0000
20 US	0.9973	0.9973	0.9973	0.9973	0.9973	0.9974	0.9978	0.9995	1.0000
50 US	0.9967	0.9967	0.9967	0.9967	0.9967	0.9968	0.9978	0.9998	1.0000
100 US	0.9957	0.9957	0.9957	0.9957	0.9957	0.9960	0.9979	0.9998	1.0000
200 US	0.9939	0.9939	0.9939	0.9939	0.9939	0.9946	0.9981	0.9998	1.0000
500 US	0.9898	0.9898	0.9898	0.9898	0.9901	0.9925	0.9987	0.9999	1.0000
1 MS	0.9859	0.9859	0.9859	0.9860	0.9868	0.9925	0.9994	1.0000	1.0000
2 MS	0.9830	0.9831	0.9831	0.9833	0.9854	0.9956	0.9998	1.0000	1.0000
5 MS	0.9822	0.9822	0.9823	0.9829	0.9885	0.9997	1.0000	1.0000	1.0000
10 MS	0.9822	0.9822	0.9823	0.9838	0.9930	1.0000	1.0000	1.0000	1.0000
20 MS	0.9822	0.9822	0.9825	0.9853	0.9974	1.0000	1.0000	1.0000	1.0000
50 MS	0.9822	0.9822	0.9830	0.9891	0.9999	1.0000	1.0000	1.0000	1.0000
100 MS	0.9821	0.9823	0.9838	0.9934	1.0000	1.0000	1.0000	1.0000	1.0000
200 MS	0.9821	0.9825	0.9854	0.9976	1.0000	1.0000	1.0000	1.0000	1.0000
500 MS	0.9821	0.9829	0.9891	0.9999	1.0000	1.0000	1.0000	1.0000	1.0000
1 S	0.9820	0.9837	0.9933	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2 S	0.9819	0.9852	0.9975	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
5 S	0.9818	0.9890	0.9999	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10 S	0.9818	0.9933	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

# THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE

## OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-06 K01= 9.0000E-02 K02= 9.0000E-07  
 DELTA= 1.0000E+00 T01= 7.0000E-04 T02= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-08 SEC  
 FOLLOWED BY A CONSTANT RATE OF 1.0000E+03 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
 TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	1 MS	100 US	10 US
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978
1 US	0.9977	0.9977	0.9977	0.9977	0.9977	0.9978	0.9979
2 US	0.9977	0.9977	0.9977	0.9977	0.9977	0.9978	0.9981
5 US	0.9976	0.9976	0.9976	0.9976	0.9977	0.9978	0.9986
10 US	0.9975	0.9975	0.9975	0.9975	0.9976	0.9978	0.9990
20 US	0.9973	0.9973	0.9973	0.9973	0.9974	0.9978	0.9993
50 US	0.9967	0.9967	0.9967	0.9967	0.9968	0.9978	0.9998
100 US	0.9957	0.9957	0.9957	0.9957	0.9960	0.9979	0.9998
200 US	0.9939	0.9939	0.9939	0.9939	0.9946	0.9981	0.9998
500 US	0.9897	0.9898	0.9898	0.9898	0.9925	0.9987	0.9999
1 MS	0.9858	0.9858	0.9858	0.9858	0.9925	0.9994	1.0000
2 MS	0.9829	0.9830	0.9830	0.9832	0.9956	0.9998	1.0000
5 MS	0.9819	0.9819	0.9819	0.9826	0.9996	1.0000	1.0000
10 MS	0.9815	0.9815	0.9817	0.9831	0.9999	1.0000	1.0000
20 MS	0.9808	0.9808	0.9811	0.9841	0.9999	1.0000	1.0000
50 MS	0.9787	0.9787	0.9796	0.9863	0.9999	1.0000	1.0000
100 MS	0.9751	0.9753	0.9772	0.9885	0.9999	1.0000	1.0000
200 MS	0.9681	0.9686	0.9726	0.9914	0.9999	1.0000	1.0000
500 MS	0.9473	0.9490	0.9616	0.9927	0.9999	1.0000	1.0000
1 S	0.9135	0.9184	0.9494	0.9927	0.9999	1.0000	1.0000
2 S	0.8692	0.8644	0.9380	0.9927	0.9999	1.0000	1.0000
5 S	0.6818	0.7480	0.9320	0.9927	0.9999	1.0000	1.0000
10 S	0.4725	0.6488	0.9317	0.9927	0.9999	1.0000	1.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-06 K01= 9.0000E-02 K02= 9.0000E-07  
DELTA= 1.0000E+00 TC1= 7.0000E-04 TD2= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+1C RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+04 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	1 MS	100 US	10 US
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978
1 US	0.9977	0.9977	0.9977	0.9977	0.9977	0.9978	0.9979
2 US	0.9977	0.9977	0.9977	0.9977	0.9977	0.9978	0.9981
3 US	0.9976	0.9976	0.9976	0.9976	0.9977	0.9978	0.9986
10 US	0.9975	0.9975	0.9975	0.9975	0.9976	0.9978	0.9990
20 US	0.9973	0.9973	0.9973	0.9973	0.9974	0.9978	0.9995
50 US	0.9967	0.9967	0.9967	0.9967	0.9968	0.9978	0.9998
100 US	0.9956	0.9956	0.9957	0.9957	0.9960	0.9979	0.9998
200 US	0.9938	0.9938	0.9938	0.9939	0.9946	0.9981	0.9998
500 US	0.9896	0.9896	0.9897	0.9900	0.9924	0.9987	0.9999
1 MS	0.9855	0.9855	0.9855	0.9864	0.9922	0.9993	1.0000
2 MS	0.9820	0.9820	0.9821	0.9845	0.9951	0.9998	1.0000
3 MS	0.9791	0.9791	0.9792	0.9795	0.9990	0.9999	1.0000
10 MS	0.9755	0.9756	0.9757	0.9774	0.9993	0.9999	1.0000
20 MS	0.9685	0.9686	0.9690	0.9729	0.9993	0.9999	1.0000
50 MS	0.9478	0.9480	0.9495	0.9515	0.9993	0.9999	1.0000
100 MS	0.9143	0.9148	0.9191	0.9247	0.9993	0.9999	1.0000
200 MS	0.8506	0.8522	0.8656	0.8827	0.9993	0.9999	1.0000
500 MS	0.6848	0.6924	0.7505	0.8328	0.9993	0.9999	1.0000
1 S	0.4765	0.4992	0.6517	0.8323	0.9993	0.9999	1.0000
2 S	0.2299	0.2860	0.5914	0.8320	0.9993	0.9999	1.0000
3 S	0.0256	0.1334	0.5772	0.8320	0.9993	0.9999	1.0000
10 S	0.0007	0.1202	0.5769	0.8321	0.9993	0.9999	1.0000

10<sup>16</sup>, 10<sup>11</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-06 KD1= 9.0000E-C2 KD2= 9.0000E-C7  
DELTA= 1.0000E+00 TD1= 7.0000E-C4 TD2= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+10 RAD/S/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+05 RAD/S/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)					
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9978	0.9979	0.9978	0.9978	0.9978	0.9978
1 US	0.9977	0.9977	0.9977	0.9977	0.9977	0.9977
2 US	0.9977	0.9977	0.9977	0.9977	0.9977	0.9977
5 US	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976
10 US	0.9975	0.9975	0.9975	0.9975	0.9975	0.9975
20 US	0.9973	0.9973	0.9973	0.9973	0.9973	0.9973
50 US	0.9966	0.9966	0.9966	0.9966	0.9966	0.9966
100 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955
200 US	0.9935	0.9935	0.9935	0.9935	0.9935	0.9935
500 US	0.9824	0.9824	0.9824	0.9824	0.9824	0.9824
1 MS	0.9821	0.9821	0.9821	0.9821	0.9821	0.9821
2 MS	0.9730	0.9730	0.9731	0.9731	0.9731	0.9731
5 MS	0.9516	0.9516	0.9518	0.9518	0.9518	0.9518
10 MS	0.9180	0.9180	0.9194	0.9194	0.9194	0.9194
20 MS	0.8542	0.8543	0.8557	0.8557	0.8557	0.8557
50 MS	0.6882	0.6889	0.6956	0.6956	0.6956	0.6956
100 MS	0.4800	0.4823	0.5025	0.5025	0.5025	0.5025
200 MS	0.2333	0.2392	0.2892	0.2892	0.2892	0.2892
500 MS	0.0267	0.0307	0.1357	0.1357	0.1357	0.1357
1 S	0.0007	0.0142	0.1213	0.1213	0.1213	0.1213
2 S	0.0000	0.0135	0.1205	0.1205	0.1205	0.1205
5 S	0.0000	0.0135	0.1201	0.1201	0.1201	0.1201
10 S	0.0000	0.0135	0.1200	0.1200	0.1200	0.1200

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-06 K01= 9.0000E-02 K02= 9.0000E-07  
DELTA= 1.0000E+00 T01= 7.0000E-04 T02= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+06 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	1C MS	1 MS	100 US	10 US	1 US
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9978	0.9978	0.9978	C.9978	0.9978	0.9978	0.9978	0.9978	0.9977
1 US	0.9977	0.9977	0.9977	C.9977	0.9977	0.9977	0.9977	0.9979	0.9991
2 US	0.9977	0.9977	0.9977	C.9977	0.9977	0.9977	0.9977	0.9981	0.9997
5 US	0.9976	0.9976	0.9976	C.9976	0.9976	0.9976	0.9977	0.9985	0.9999
10 US	0.9974	0.9974	0.9974	C.9974	0.9974	0.9975	0.9977	0.9990	0.9999
20 US	0.9971	0.9971	0.9971	C.9971	0.9971	0.9972	0.9976	0.9993	0.9999
50 US	0.9961	0.9961	0.9961	C.9961	0.9961	0.9963	0.9973	0.9993	0.9999
100 US	0.9943	0.9943	0.9943	C.9943	0.9944	0.9947	0.9970	0.9993	0.9999
200 US	0.9904	0.9904	0.9904	C.9905	0.9906	0.9915	0.9964	0.9993	0.9999
500 US	0.9765	0.9765	0.9765	C.9766	0.9771	0.9815	0.9951	0.9993	0.9999
1 MS	0.9487	0.9487	0.9487	C.9489	0.9510	0.9665	0.9940	0.9993	0.9999
2 MS	0.8873	0.8873	0.8874	C.8884	0.8969	0.9470	0.9931	0.9993	0.9999
5 MS	0.7161	0.7162	0.7167	C.7223	0.7706	0.9336	0.9929	0.9993	0.9999
10 MS	0.4996	0.4998	0.5017	C.5204	0.6615	0.9328	0.9932	0.9993	0.9999
20 MS	0.2431	0.2437	0.2489	C.2974	0.5957	0.9328	0.9979	0.9993	0.9999
50 MS	0.0280	0.0292	0.0400	C.1365	0.5813	0.9328	0.9927	0.9993	0.9999
100 MS	0.0000	0.0021	0.0144	C.1221	0.5811	0.9332	0.9927	0.9993	0.9999
200 MS	0.0000	0.0014	0.0137	C.1217	0.5808	0.9387	0.9927	0.9993	0.9999
500 MS	0.0000	0.0014	0.0136	C.1214	0.5802	0.9317	0.9927	0.9993	0.9999
1 S	0.0000	0.0014	0.0136	C.1210	0.5808	0.9317	0.9927	0.9993	0.9999
2 S	0.0000	0.0014	0.0135	C.1208	0.5990	0.9317	0.9927	0.9993	0.9999
5 S	0.0000	0.0014	0.0131	C.1282	0.6774	0.9317	0.9927	0.9993	0.9999
10 S	0.0000	0.0018	0.0193	C.1771	0.5769	0.9317	0.9927	0.9993	0.9999

# THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE

## OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-06 KC1= 9.0000E-02 KD2= 9.0000E-07  
 DELTA= 1.0000E+00 TD1= 7.0000E-04 TD2= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-08 SEC  
 FOLLOWED BY A CONSTANT RATE CF 1.0000E+07 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
 TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9977	0.9977
1 US	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976	0.9977	0.9979	0.9991	0.9991
2 US	0.9975	0.9975	0.9975	0.9975	0.9975	0.9975	0.9976	0.9979	0.9993	0.9993
5 US	0.9972	0.9972	0.9972	0.9972	0.9972	0.9972	0.9973	0.9980	0.9993	0.9993
10 US	0.9966	0.9966	0.9966	0.9966	0.9966	0.9966	0.9968	0.9982	0.9993	0.9993
20 US	0.9953	0.9953	0.9953	0.9953	0.9953	0.9954	0.9959	0.9985	0.9993	0.9993
50 US	0.9911	0.9911	0.9911	0.9911	0.9911	0.9913	0.9932	0.9985	0.9993	0.9993
100 US	0.9825	0.9825	0.9825	0.9825	0.9826	0.9834	0.9889	0.9981	0.9993	0.9993
200 US	0.9603	0.9603	0.9603	0.9603	0.9606	0.9636	0.9812	0.9974	0.9993	0.9993
500 US	0.8649	0.8649	0.8649	0.8651	0.8676	0.8886	0.9639	0.9959	0.9993	0.9993
1 MS	0.6711	0.6711	0.6712	0.6723	0.6832	0.7671	0.9477	0.9947	0.9993	0.9993
2 MS	0.3530	0.3530	0.3534	0.3574	0.3951	0.6354	0.9364	0.9983	0.9993	0.9993
5 MS	0.0417	0.0418	0.0429	0.0532	0.1463	0.5823	0.9329	0.9927	0.9993	0.9993
10 MS	0.0011	0.0013	0.0025	0.0147	0.1223	0.5814	0.9332	0.9927	0.9993	0.9993
20 MS	0.0000	0.0001	0.0014	0.0137	0.1219	0.5813	0.9388	0.9927	0.9993	0.9993
50 MS	0.0000	0.0001	0.0014	0.0137	0.1219	0.5814	0.9317	0.9927	0.9993	0.9993
100 MS	0.0000	0.0001	0.0014	0.0137	0.1218	0.5827	0.9317	0.9927	0.9993	0.9993
200 MS	0.0000	0.0001	0.0014	0.0137	0.1220	0.6016	0.9317	0.9927	0.9993	0.9993
500 MS	0.0000	0.0001	0.0014	0.0142	0.1293	0.8784	0.9317	0.9927	0.9993	0.9993
1 S	0.0000	0.0002	0.0018	0.0184	0.1774	0.5769	0.9317	0.9927	0.9993	0.9993
2 S	0.0000	0.0003	0.0033	0.0334	0.3337	0.5769	0.9317	0.9927	0.9993	0.9993
5 S	0.0000	0.0008	0.0083	0.0833	0.8333	0.5769	0.9317	0.9927	0.9993	0.9993
10 S	0.0000	0.0017	0.0167	0.1667	0.1200	0.5769	0.9317	0.9927	0.9993	0.9993



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A TANTALUM OXIDE CAPACITOR

## THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-06 K01= 9.0000E-02 K02= 9.0000E-07  
DELTA= 1.0000E+00 T01= 7.0000E-04 T02= 1.5000E+00

THE RADIATION PULSE IS 1.0000 $\pm$ 11 RADS/SEC FOR 2.5000 $\pm$ 08 SEC FOLLOWED BY A CONSTANT RATE OF 0.0000 $\pm$ 00 RADS/SEC

**$\tau$  IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.**

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)					
	INF	10 SEC	1 SEC	100 MS	1C MS	1 MS
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9777	0.9777	0.9777	0.9777	0.9777	0.9777
1 US	0.9775	0.9775	0.9775	0.9775	0.9775	0.9775
2 US	0.9773	0.9773	0.9773	0.9773	0.9773	0.9773
5 US	0.9767	0.9767	0.9767	0.9767	0.9767	0.9767
10 US	0.9756	0.9756	0.9756	0.9756	0.9756	0.9756
20 US	0.9734	0.9734	0.9734	0.9734	0.9734	0.9734
50 US	0.9672	0.9672	0.9672	0.9672	0.9672	0.9672
100 US	0.9575	0.9575	0.9575	0.9575	0.9575	0.9575
200 US	0.9402	0.9402	0.9402	0.9402	0.9402	0.9402
500 US	0.9022	0.9022	0.9022	0.9022	0.9022	0.9022
1 MS	0.8674	0.8674	0.8674	0.8674	0.8674	0.8674
2 MS	0.8429	0.8429	0.8431	0.8452	0.8643	0.9586
5 MS	0.8354	0.8354	0.8361	0.8424	0.8933	0.9969
10 MS	0.8353	0.8354	0.8360	0.8500	0.9353	1.0000
20 MS	0.8352	0.8356	0.8384	0.8643	0.9762	1.0000
50 MS	0.8352	0.8360	0.8431	0.8594	0.9988	1.0000
100 MS	0.8351	0.8367	0.8507	0.8939	1.0000	1.0000
200 MS	0.8349	0.8382	0.8648	0.9775	1.0000	1.0000
500 MS	0.8345	0.8425	0.8594	0.9987	1.0000	1.0000
1 S	0.8339	0.8496	0.9385	0.9999	1.0000	1.0000
2 S	0.8332	0.8633	0.9769	0.9999	1.0000	1.0000
5 S	0.8326	0.8981	0.9587	1.0000	1.0000	1.0000
10 S	0.8325	0.9391	1.0000	1.0000	1.0000	1.0000



10", C

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-06 KQ1= 9.0000E-02 KD2= 9.0000E-07  
DELTA= 1.0000E+00 TD1= 7.0000E-04 TD2= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+11 RAD/S/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+03 RAD/S/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	1 MS	100 US	10 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9777	0.9777	0.9777	0.9777	0.9777	0.9778	0.9780
1 US	0.9775	0.9775	0.9775	0.9775	0.9776	0.9778	0.9796
2 US	0.9773	0.9773	0.9773	0.9773	0.9774	0.9778	0.9814
5 US	0.9767	0.9767	0.9767	0.9767	0.9768	0.9778	0.9857
10 US	0.9756	0.9756	0.9756	0.9756	0.9758	0.9778	0.9905
20 US	0.9734	0.9734	0.9734	0.9734	0.9739	0.9779	0.9952
50 US	0.9672	0.9672	0.9672	0.9672	0.9685	0.9783	0.9978
100 US	0.9575	0.9575	0.9575	0.9575	0.9606	0.9791	0.9980
200 US	0.9402	0.9402	0.9402	0.9402	0.9479	0.9812	0.9983
500 US	0.9022	0.9022	0.9022	0.9022	0.9284	0.9874	0.9989
1 MS	0.8674	0.8674	0.8675	0.8682	0.9287	0.9938	0.9998
2 MS	0.8428	0.8428	0.8430	0.8451	0.9586	0.9985	1.0000
5 MS	0.8351	0.8352	0.8358	0.8421	0.9968	1.0000	1.0000
10 MS	0.8347	0.8348	0.8362	0.8494	0.9999	1.0000	1.0000
20 MS	0.8341	0.8344	0.8372	0.8632	0.9999	1.0000	1.0000
50 MS	0.8322	0.8330	0.8402	0.8970	0.9999	1.0000	1.0000
100 MS	0.8291	0.8308	0.8450	0.9349	0.9999	1.0000	1.0000
200 MS	0.8230	0.8264	0.8537	0.9716	0.9999	1.0000	1.0000
500 MS	0.8049	0.8135	0.8751	0.9916	0.9999	1.0000	1.0000
1 S	0.7757	0.7937	0.8684	0.9927	0.9999	1.0000	1.0000
2 S	0.7206	0.7589	0.9201	0.9927	0.9999	1.0000	1.0000
5 S	0.5781	0.6249	0.9311	0.9927	0.9999	1.0000	1.0000
10 S	0.4006	0.6223	0.9317	0.9927	0.9999	1.0000	1.0000

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THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-06 KD1= 9.0000E-02 KD2= 9.0000E-07  
DELTA= 1.0000E+00 TD1= 7.0000E-04 TD2= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+11 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+04 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9777	0.9777	0.9777	0.9777	0.9777	0.9777	0.9778
1 US	0.9775	0.9775	0.9775	0.9775	0.9775	0.9776	0.9796
2 US	0.9773	0.9773	0.9773	0.9773	0.9773	0.9774	0.9814
5 US	0.9767	0.9767	0.9767	0.9767	0.9767	0.9768	0.9857
10 US	0.9756	0.9756	0.9756	0.9756	0.9756	0.9758	0.9905
20 US	0.9734	0.9734	0.9734	0.9734	0.9735	0.9739	0.9952
50 US	0.9672	0.9672	0.9672	0.9672	0.9673	0.9685	0.9978
100 US	0.9575	0.9575	0.9575	0.9575	0.9578	0.9606	0.9980
200 US	0.9402	0.9402	0.9402	0.9403	0.9410	0.9479	0.9983
500 US	0.9021	0.9021	0.9021	0.9024	0.9052	0.9283	0.9989
1 MS	0.8671	0.8671	0.8672	0.8679	0.8756	0.9285	0.9998
2 MS	0.8420	0.8420	0.8422	0.8443	0.8635	0.9582	1.0000
5 MS	0.8327	0.8328	0.8335	0.8398	0.8911	0.9962	1.0000
10 MS	0.8296	0.8298	0.8312	0.8446	0.9313	0.9993	1.0000
20 MS	0.8237	0.8240	0.8269	0.8535	0.9704	0.9993	1.0000
50 MS	0.8060	0.8069	0.8145	0.8753	0.9917	0.9993	1.0000
100 MS	0.7774	0.7792	0.7952	0.8991	0.9927	0.9993	1.0000
200 MS	0.7231	0.7273	0.7612	0.9211	0.9927	0.9993	1.0000
500 MS	0.5819	0.5945	0.6880	0.9317	0.9927	0.9993	1.0000
1 S	0.4046	0.4342	0.6250	0.9317	0.9927	0.9993	1.0000
2 S	0.1951	0.2574	0.5265	0.9317	0.9927	0.9993	1.0000
5 S	0.0217	0.1314	0.5771	0.9317	0.9927	0.9993	1.0000
10 S	0.0006	0.1202	0.5769	0.9317	0.9927	0.9993	1.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE

OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-06 K01= 9.0000E-02 K02= 9.0000E-07  
 DELTA= 1.0000E+00 T01= 7.0000E-04 T02= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+11 RAD/S/SEC FOR 2.5000E-08 SEC  
 FOLLOWED BY A CONSTANT RATE OF 1.0000E+05 RAD/S/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
 TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	10C MS	1C MS	1 MS	100 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9777	0.9777	0.9777	0.9777	0.9777	0.9777	0.9778
1 US	0.9775	0.9775	0.9775	0.9775	0.9775	0.9776	0.9778
2 US	0.9773	0.9773	0.9773	0.9773	0.9773	0.9774	0.9778
5 US	0.9767	0.9767	0.9767	0.9767	0.9767	0.9768	0.9778
10 US	0.9756	0.9756	0.9756	0.9756	0.9756	0.9758	0.9778
20 US	0.9734	0.9734	0.9734	0.9734	0.9735	0.9739	0.9779
50 US	0.9671	0.9671	0.9671	0.9672	0.9673	0.9685	0.9782
100 US	0.9573	0.9573	0.9573	0.9574	0.9577	0.9605	0.9790
200 US	0.9399	0.9399	0.9399	0.9400	0.9407	0.9476	0.9811
500 US	0.9010	0.9010	0.9010	0.9013	0.9041	0.9274	0.9870
1 MS	0.8641	0.8641	0.8642	0.8650	0.8727	0.9264	0.9932
2 MS	0.8343	0.8343	0.8345	0.8366	0.8563	0.9539	0.9978
5 MS	0.8094	0.8095	0.8101	0.8169	0.8716	0.9899	0.9993
10 MS	0.7807	0.7808	0.7824	0.7974	0.8969	0.9927	0.9999
20 MS	0.7264	0.7268	0.7304	0.7632	0.9206	0.9927	0.9999
50 MS	0.5852	0.5865	0.5976	0.6899	0.9317	0.9927	0.9999
100 MS	0.4081	0.4111	0.4374	0.6271	0.9317	0.9927	0.9999
200 MS	0.1983	0.2049	0.2606	0.5291	0.9317	0.9927	0.9999
500 MS	0.0227	0.0349	0.1332	0.5802	0.9317	0.9927	0.9999
1 S	0.0006	0.0141	0.1212	0.5792	0.9317	0.9927	0.9999
2 S	0.0000	0.0135	0.1205	0.5781	0.9317	0.9927	0.9999
5 S	0.0000	0.0135	0.1201	0.5771	0.9317	0.9927	0.9999
10 S	0.0000	0.0135	0.1200	0.5785	0.9317	0.9927	0.9999

10", 10 S

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-06 K01= 9.0000E-02 K02= 9.0000E-07  
DELTA= 1.0000E+00 TD1= 7.0000E-04 TD2= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+11 RAD/SEC FOR 2.5000E-06 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+06 RAD/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9777	0.9777	0.9777	0.9777	0.9777	0.9777	0.9778	0.9778	0.9780
1 US	0.9775	0.9775	0.9775	0.9775	0.9775	0.9775	0.9777	0.9796	0.9916
2 US	0.9773	0.9773	0.9773	0.9773	0.9773	0.9773	0.9777	0.9814	0.9968
5 US	0.9766	0.9766	0.9766	0.9766	0.9766	0.9767	0.9777	0.9856	0.9996
10 US	0.9755	0.9755	0.9755	0.9755	0.9755	0.9757	0.9777	0.9904	0.9998
20 US	0.9732	0.9732	0.9732	0.9732	0.9733	0.9737	0.9777	0.9951	0.9998
50 US	0.9667	0.9667	0.9667	0.9667	0.9668	0.9680	0.9778	0.9976	0.9998
100 US	0.9562	0.9562	0.9562	0.9562	0.9565	0.9594	0.9782	0.9979	0.9999
200 US	0.9370	0.9370	0.9370	0.9371	0.9372	0.9449	0.9796	0.9980	0.9999
500 US	0.8901	0.8901	0.8902	0.8905	0.8935	0.9182	0.9839	0.9985	0.9999
1 MS	0.8347	0.8347	0.8348	0.8357	0.8443	0.9050	0.9884	0.9992	0.9999
2 MS	0.7608	0.7608	0.7611	0.7636	0.7875	0.9132	0.9918	0.9993	0.9999
5 MS	0.6091	0.6092	0.6102	0.6198	0.7011	0.9314	0.9927	0.9993	0.9999
10 MS	0.4249	0.4252	0.4277	0.4523	0.6320	0.9317	0.9927	0.9993	0.9999
20 MS	0.2068	0.2074	0.2132	0.2674	0.5904	0.9317	0.9927	0.9993	0.9999
50 MS	0.0238	0.0251	0.0360	0.1343	0.5813	0.9317	0.9927	0.9993	0.9999
100 MS	0.0006	0.0020	0.0143	0.1220	0.5811	0.9317	0.9927	0.9993	0.9999
200 MS	0.0000	0.0014	0.0137	0.1217	0.5808	0.9317	0.9927	0.9993	0.9999
500 MS	0.0000	0.0014	0.0136	0.1214	0.5802	0.9317	0.9927	0.9993	0.9999
1 S	0.0000	0.0014	0.0136	0.1210	0.5802	0.9317	0.9927	0.9993	0.9999
2 S	0.0000	0.0014	0.0135	0.1208	0.5990	0.9317	0.9927	0.9993	0.9999
5 S	0.0000	0.0014	0.0141	0.1282	0.8774	0.9317	0.9927	0.9993	0.9999
10 S	0.0000	0.0018	0.0183	0.1771	0.5769	0.9317	0.9927	0.9993	0.9999

# THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE

## OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-06 KN1= 9.0000E-02 KD2= 9.0000E-07  
 DELTA= 1.0000E+00 TD1= 7.0000E-04 TD2= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+11 RAD/SEC FOR 2.5000E-08 SEC  
 FOLLOWED BY A CONSTANT RATE OF 1.0000E+07 RAD/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
 TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US
10 US	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
20 US	0.9777	0.9777	0.9777	0.9777	0.9777	0.9777	0.9778
50 US	0.9774	0.9774	0.9774	0.9774	0.9775	0.9775	0.9795
100 US	0.9771	0.9771	0.9771	0.9771	0.9771	0.9772	0.9812
200 US	0.9762	0.9762	0.9762	0.9762	0.9762	0.9763	0.9852
500 US	0.9747	0.9747	0.9747	0.9747	0.9747	0.9749	0.9897
1 MS	0.9715	0.9715	0.9715	0.9715	0.9716	0.9720	0.9927
2 MS	0.9618	0.9618	0.9618	0.9618	0.9619	0.9632	0.9927
5 MS	0.9448	0.9448	0.9448	0.9449	0.9452	0.9484	0.9927
10 MS	0.9084	0.9084	0.9084	0.9085	0.9095	0.9184	0.9927
20 MS	0.7884	0.7884	0.7884	0.7889	0.7935	0.8323	0.9927
50 MS	0.5904	0.5904	0.5906	0.5922	0.6075	0.7224	0.9927
100 MS	0.3026	0.3027	0.3031	0.3077	0.3511	0.6199	0.9927
200 MS	0.0355	0.0356	0.0366	0.0472	0.1422	0.5820	0.9927
500 MS	0.0010	0.0011	0.0023	0.0146	0.1223	0.5814	0.9927
1 S	0.0000	0.0001	0.0014	0.0137	0.1219	0.5813	0.9927
2 S	0.0000	0.0001	0.0014	0.0137	0.1219	0.5814	0.9927
5 S	0.0000	0.0001	0.0014	0.0137	0.1219	0.5814	0.9927
10 S	0.0000	0.0001	0.0014	0.0137	0.1219	0.5814	0.9927
20 S	0.0000	0.0001	0.0014	0.0137	0.1219	0.5814	0.9927
50 S	0.0000	0.0001	0.0014	0.0137	0.1219	0.5814	0.9927
100 S	0.0000	0.0001	0.0014	0.0137	0.1219	0.5814	0.9927
200 S	0.0000	0.0001	0.0014	0.0137	0.1219	0.5814	0.9927
500 S	0.0000	0.0001	0.0014	0.0137	0.1219	0.5814	0.9927
1000 S	0.0000	0.0001	0.0014	0.0137	0.1219	0.5814	0.9927
2000 S	0.0000	0.0001	0.0014	0.0137	0.1219	0.5814	0.9927
5000 S	0.0000	0.0001	0.0014	0.0137	0.1219	0.5814	0.9927
10000 S	0.0000	0.0001	0.0014	0.0137	0.1219	0.5814	0.9927

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-06 KD1= 9.0000E-02 KD2= 9.0000E-07  
DELTA= 1.0000E+00 TD1= 7.0000E-04 TD2= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 0.0000E+00 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
G	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.7985	0.7985	0.7985	C.7985	0.7985	0.7985	0.7985	0.7987	0.8009
1 US	0.7967	0.7967	0.7967	C.7968	0.7968	0.7970	0.7988	0.8162	0.9254
2 US	0.7950	0.7950	0.7950	C.7950	0.7950	0.7954	0.7990	0.8320	0.9713
5 US	0.7896	0.7896	C.7896	C.7897	0.7897	0.7907	0.7998	0.8717	0.9966
10 US	0.7809	0.7809	0.7809	C.7809	0.7811	0.7830	0.8012	0.9157	0.9978
20 US	0.7639	0.7639	C.7639	C.7639	0.7643	0.7683	0.8039	0.9567	0.9978
50 US	0.7164	0.7164	C.7164	C.7165	0.7176	0.7280	0.8110	0.9783	0.9979
100 US	0.6475	0.6475	0.6475	C.6478	0.6501	0.6726	0.8216	0.9806	0.9984
200 US	0.5399	0.5399	C.5399	C.5405	0.5458	0.5951	0.8405	0.9831	1.0000
500 US	0.3574	0.3574	C.3576	C.3592	0.3753	0.5100	0.8883	0.9890	1.0000
1 MS	0.2411	0.2411	C.2415	C.2453	0.2823	0.5472	0.9414	0.9949	1.0000
2 MS	0.1809	0.1810	0.1820	C.1913	C.2775	0.7317	0.9852	1.0000	1.0000
5 MS	0.1655	0.1658	0.1689	C.1988	0.4429	0.9772	0.9998	1.0000	1.0000
10 MS	0.1653	0.1660	0.1728	C.2376	C.6619	0.9998	1.0000	1.0000	1.0000
20 MS	0.1652	0.1668	C.1810	C.3102	0.8757	1.0000	1.0000	1.0000	1.0000
50 MS	0.1651	0.1692	0.2051	C.4890	0.9936	1.0000	1.0000	1.0000	1.0000
100 MS	0.1649	0.1732	C.2437	C.6898	0.9997	1.0000	1.0000	1.0000	1.0000
200 MS	0.1646	0.1811	C.3153	C.8850	0.9998	1.0000	1.0000	1.0000	1.0000
500 MS	0.1637	0.2043	C.4911	C.9927	C.9999	1.0000	1.0000	1.0000	1.0000
1 S	0.1626	0.2416	C.6882	C.9987	1.0000	1.0000	1.0000	1.0000	1.0000
2 S	0.1612	0.3116	C.8812	C.9994	1.0000	1.0000	1.0000	1.0000	1.0000
5 S	0.1600	0.4876	C.9526	C.9999	1.0000	1.0000	1.0000	1.0000	1.0000
10 S	0.1598	0.6888	C.9999	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
KP= 9.0000E-06 KC1= 9.0000E-02 KD2= 9.0000E-07  
DELTA= 1.0000E+00 TD1= 7.0000E-04 TD2= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+03 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	10C MS	1C MS	1 MS	100 US	10 US	1 US	
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 MS	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7987	0.8009	
1 US	0.7967	0.7967	0.7967	0.7968	0.7968	0.7970	0.7988	0.8162	0.9254	
2 US	0.7950	0.7950	0.7950	0.7950	0.7950	0.7954	0.7990	0.8320	0.9713	
5 US	0.7896	0.7896	0.7896	0.7897	0.7897	0.7907	0.7998	0.8717	0.9966	
10 US	0.7809	0.7809	0.7809	0.7809	0.7811	0.7830	0.8012	0.9157	0.9978	
20 US	0.7639	0.7639	0.7639	0.7639	0.7643	0.7683	0.8039	0.9567	0.9978	
50 US	0.7164	0.7164	0.7164	0.7165	0.7176	0.7280	0.8110	0.9783	0.9979	
100 US	0.6475	0.6475	0.6475	0.6478	0.6501	0.6726	0.8216	0.9806	0.9984	
200 US	0.5399	0.5399	0.5399	0.5405	0.5458	0.5951	0.8405	0.9831	1.0000	
500 US	0.3574	0.3574	0.3576	0.3592	0.3753	0.5100	0.8883	0.9890	1.0000	
1 MS	0.2411	0.2411	0.2415	0.2453	0.2823	0.5472	0.9414	0.9949	1.0000	
2 MS	0.1809	0.1810	0.1820	0.1912	0.2775	0.7316	0.9852	1.0000	1.0000	
5 MS	0.1654	0.1658	0.1698	0.1987	0.4428	0.9772	0.9998	1.0000	1.0000	
10 MS	0.1652	0.1659	0.1727	0.2375	0.6617	0.9997	1.0000	1.0000	1.0000	
20 MS	0.1650	0.1666	0.1808	0.3099	0.8752	0.9999	1.0000	1.0000	1.0000	
50 MS	0.1645	0.1686	0.2045	0.4880	0.9929	0.9999	1.0000	1.0000	1.0000	
100 MS	0.1638	0.1720	0.2423	0.8875	0.9990	0.9999	1.0000	1.0000	1.0000	
200 MS	0.1623	0.1786	0.3121	0.8805	0.9991	0.9999	1.0000	1.0000	1.0000	
500 MS	0.1579	0.1979	0.4811	0.9858	0.9991	0.9999	1.0000	1.0000	1.0000	
1 S	0.1513	0.2281	0.6654	0.9915	0.9993	0.9999	1.0000	1.0000	1.0000	
2 S	0.1395	0.2818	0.8371	0.9921	0.9993	0.9999	1.0000	1.0000	1.0000	
5 S	0.1111	0.3997	0.9267	0.9927	0.9993	0.9999	1.0000	1.0000	1.0000	
10 S	0.0769	0.5021	0.9316	0.9927	0.9993	0.9999	1.0000	1.0000	1.0000	

10<sup>12</sup>, 10<sup>3</sup>



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-06 KD1= 9.0000E-02 KD2= 9.0000E-07  
DELTA= 1.0000E+00 T01= 7.0000E-04 T02= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+12 RAD/S/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+04 RAD/S/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	1C MS	1 MS	100 US
25 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1 US	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7987
2 US	0.7967	0.7967	0.7967	0.7968	0.7968	0.7970	0.8162
5 US	0.7950	0.7950	0.7950	0.7950	0.7950	0.7954	0.8320
10 US	0.7896	0.7896	0.7896	0.7897	0.7897	0.7907	0.8717
20 US	0.7809	0.7809	0.7809	0.7809	0.7811	0.7830	0.9157
50 US	0.7639	0.7639	0.7639	0.7639	0.7643	0.7683	0.9567
100 US	0.7164	0.7164	0.7164	0.7165	0.7176	0.7280	0.9783
200 US	0.6475	0.6475	0.6475	0.6478	0.6501	0.6726	0.9806
500 US	0.5399	0.5399	0.5399	0.5405	0.5458	0.5951	0.9831
1 MS	0.3573	0.3573	0.3575	0.3592	0.3753	0.5100	0.9890
2 MS	0.2410	0.2410	0.2414	0.2453	0.2822	0.5471	0.9949
5 MS	0.1808	0.1803	0.1818	0.1911	0.2773	0.7314	1.0000
10 MS	0.1650	0.1653	0.1684	0.1982	0.4421	0.9766	1.0000
20 MS	0.1641	0.1649	0.1717	0.2364	0.6598	0.9991	1.0000
50 MS	0.1629	0.1645	0.1786	0.3072	0.8713	0.9993	1.0000
100 MS	0.1593	0.1634	0.1988	0.4793	0.9867	0.9993	1.0000
200 MS	0.1535	0.1615	0.2302	0.6672	0.9526	0.9993	1.0000
500 MS	0.1426	0.1581	0.2852	0.8410	0.9526	0.9993	1.0000
1 S	0.1142	0.1494	0.4031	0.9275	0.9927	0.9993	1.0000
2 S	0.0789	0.1391	0.5030	0.9312	0.9927	0.9993	1.0000
5 S	0.0376	0.1280	0.5630	0.9314	0.9927	0.9993	1.0000
10 S	0.0042	0.1205	0.5766	0.9317	0.9927	0.9993	1.0000
	0.0001	0.1200	0.5769	0.9317	0.9927	0.9993	1.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-06 KD1= 9.0000E-02 KD2= 9.0000E-07  
DELTA= 1.0000E+00 TD1= 7.0000E-04 TD2= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-04 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+05 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7987
1 US	0.7967	0.7967	0.7967	0.7968	0.7968	0.7970	0.8162
2 US	0.7950	0.7950	0.7950	0.7950	0.7950	0.7954	0.8320
5 US	0.7896	0.7896	0.7896	0.7896	0.7897	0.7907	0.8717
10 US	0.7809	0.7809	0.7809	0.7809	0.7811	0.7830	0.9157
20 US	0.7639	0.7639	0.7639	0.7639	0.7643	0.7682	0.9567
50 US	0.7163	0.7163	0.7164	0.7165	0.7175	0.7279	0.9783
100 US	0.6474	0.6474	0.6474	0.6477	0.6500	0.6725	0.9806
200 US	0.5397	0.5397	0.5398	0.5403	0.5456	0.5949	0.9831
500 US	0.3569	0.3569	0.3571	0.3587	0.3742	0.5096	0.9889
1 MS	0.2402	0.2402	0.2406	0.2444	0.2813	0.5461	0.9948
2 MS	0.1791	0.1792	0.1801	0.1894	0.2753	0.7289	0.9999
5 MS	0.1603	0.1607	0.1637	0.1933	0.4349	0.9708	0.9999
10 MS	0.1545	0.1552	0.1618	0.2250	0.6413	0.9927	0.9999
20 MS	0.1437	0.1452	0.1506	0.2814	0.8331	0.9927	0.9999
50 MS	0.1157	0.1193	0.1506	0.4023	0.9286	0.9927	0.9999
100 MS	0.0806	0.0869	0.1408	0.5053	0.9317	0.9927	0.9999
200 MS	0.0391	0.0488	0.1300	0.5665	0.9317	0.9927	0.9999
500 MS	0.0044	0.0175	0.1220	0.5769	0.9317	0.9927	0.9999
1 S	0.0001	0.0137	0.1209	0.5769	0.9317	0.9927	0.9999
2 S	0.0000	0.0135	0.1204	0.5769	0.9317	0.9927	0.9999
5 S	0.0000	0.0135	0.1200	0.5769	0.9317	0.9927	0.9999
10 S	0.0000	0.0135	0.1200	0.5769	0.9317	0.9927	0.9999

10<sup>12</sup>, 10<sup>-5</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-06 KD1= 9.0000E-02 KD2= 9.0000E-07  
DELTA= 1.0000E+00 TD1= 7.0000E-04 TD2= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+06 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.7985	0.7985	0.7985	C.7985	0.7985	0.7985	0.7985	0.7987	0.8009	
1 US	0.7967	0.7967	0.7967	C.7967	0.7968	0.7969	0.7988	0.8161	0.9253	
2 US	0.7949	0.7949	0.7949	C.7950	0.7950	0.7954	0.7990	0.8319	0.9713	
5 US	0.7896	0.7896	C.7896	C.7896	0.7897	0.7906	0.7998	0.8716	0.9966	
10 US	0.7808	0.7808	C.7808	C.7808	0.7810	0.7830	0.8011	0.9155	0.9978	
20 US	0.7637	0.7637	C.7637	C.7638	0.7642	0.7681	0.8037	0.9566	0.9978	
50 US	0.7160	0.7160	0.7160	C.7161	0.7172	0.7276	0.8106	0.9782	0.9979	
100 US	0.6466	0.6466	C.6467	C.6469	C.6492	0.6717	0.8208	0.9804	0.9984	
200 US	0.5380	0.380	C.5381	C.5386	0.5440	0.5933	0.8391	0.9829	0.9999	
500 US	0.3526	0.3526	C.3528	C.3544	0.3705	0.5051	0.8655	0.9886	0.9999	
1 MS	0.2320	0.2320	C.2324	C.2362	0.2728	0.5363	0.9367	0.9943	0.9999	
2 MS	0.1634	0.1634	C.1643	C.1733	0.2570	0.7045	0.9787	0.9993	0.9999	
5 MS	0.1207	0.1210	C.1237	C.1504	0.3714	0.9160	0.9927	0.9993	0.9999	
10 MS	0.0841	0.0847	0.0899	C.1407	0.4924	0.9317	0.9927	0.9993	0.9999	
20 MS	0.0409	0.0419	C.0504	C.1302	0.5654	0.9317	0.9927	0.9993	0.9999	
50 MS	0.0047	0.0060	C.0178	C.1226	0.5769	0.9317	0.9927	0.9993	0.9999	
100 MS	0.0001	0.0015	C.0138	C.1216	0.5769	0.9317	0.9927	0.9993	0.9999	
200 MS	0.0000	0.0014	C.0137	C.1217	0.5769	0.9317	0.9927	0.9993	0.9999	
500 MS	0.0000	0.0014	C.0136	C.1214	0.5769	0.9317	0.9927	0.9993	0.9999	
1 S	0.0000	0.0014	C.0136	C.1210	0.5769	0.9317	0.9927	0.9993	0.9999	
2 S	0.0000	0.0014	C.0135	C.1208	0.5769	0.9317	0.9927	0.9993	0.9999	
5 S	0.0000	0.0014	C.0141	C.1242	0.5769	0.9317	0.9927	0.9993	0.9999	
10 S	0.0000	0.0013	C.0183	C.1771	0.5769	0.9317	0.9927	0.9993	0.9999	

10<sup>12</sup>, 10<sup>6</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
KP= 9.0000E-06 KD1= 9.0000E-02 KD2= 9.0000E-07  
DELTA= 1.0000E+00 TD1= 7.0000E-04 TD2= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+07 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 NS	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7985	0.7987	0.8009	
1 US	0.7967	0.7967	0.7967	0.7967	0.7967	0.7969	0.7987	0.8159	0.9246	
2 US	0.7948	0.7948	0.7948	0.7948	0.7949	0.7952	0.7988	0.8317	0.9710	
5 US	0.7893	0.7893	0.7893	0.7893	0.7894	0.7903	0.7994	0.8708	0.9964	
10 US	0.7802	0.7802	0.7802	0.7802	0.7804	0.7823	0.8003	0.9142	0.9977	
20 US	0.7624	0.7624	0.7624	0.7624	0.7628	0.7667	0.8020	0.9552	0.9977	
50 US	0.7124	0.7124	0.7124	0.7125	0.7136	0.7239	0.8068	0.9770	0.9978	
100 US	0.6389	0.6390	0.6390	0.6392	0.6416	0.6640	0.8141	0.9790	0.9982	
200 US	0.5216	0.5216	0.5217	0.5222	0.5276	0.5771	0.8274	0.9808	0.9993	
500 US	0.3123	0.3123	0.3125	0.3141	0.3299	0.4637	0.8604	0.9850	0.9993	
1 MS	0.1641	0.1641	0.1645	0.1680	0.2016	0.4507	0.8957	0.9893	0.9993	
2 MS	0.0650	0.0650	0.0657	0.0725	0.1362	0.5188	0.9236	0.9927	0.9993	
5 MS	0.0070	0.0072	0.0093	0.0197	0.1218	0.5769	0.9317	0.9927	0.9993	
10 MS	0.0002	0.0003	0.0016	0.0139	0.1219	0.5769	0.9317	0.9927	0.9993	
20 MS	0.0000	0.0001	0.0014	0.0137	0.1219	0.5769	0.9317	0.9927	0.9993	
50 MS	0.0000	0.0001	0.0014	0.0137	0.1219	0.5769	0.9317	0.9927	0.9993	
100 MS	0.0000	0.0001	0.0014	0.0137	0.1218	0.5769	0.9317	0.9927	0.9993	
200 MS	0.0000	0.0001	0.0014	0.0137	0.1220	0.5769	0.9317	0.9927	0.9993	
500 MS	0.0000	0.0001	0.0014	0.0142	0.1293	0.5769	0.9317	0.9927	0.9993	
1 S	0.0000	0.0002	0.0018	0.0184	0.1774	0.5769	0.9317	0.9927	0.9993	
2 S	0.0000	0.0003	0.0033	0.0334	0.3337	0.5769	0.9317	0.9927	0.9993	
5 S	0.0000	0.0008	0.0083	0.0833	0.8333	0.5769	0.9317	0.9927	0.9993	
10 S	0.0000	0.0017	0.0167	0.1667	0.1200	0.5769	0.9317	0.9927	0.9993	

10<sup>12</sup>, 10<sup>7</sup>

**THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A TANTALUM OXIDE CAPACITOR**

## THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-06 K01= 9.0000E-02 K02= 9.0000E-07  
DELTA= 1.0000E+00 T01= 7.0000E-04 T02= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E+08. SEC FOLLOWED BY A CONSTANT RATE CF 0.0000E+00 RADS/SEC

**TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.**

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)					1 MS	100 US	10 US	1 US
	INF	10 SEC	1 SEC	100 MS	10 MS				
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1061	0.1127
1 US	0.1031	0.1042	0.1141	0.2131	1.0000	1.0000	1.0000	1.0000	1.0000
2 US	0.1008	0.1008	0.1009	0.1014	0.1067	0.1597	0.6798	1.0000	1.0000
5 US	0.0943	0.0948	0.1000	0.1520	0.6713	1.0000	1.0000	1.0000	1.0000
10 US	0.0843	0.0926	0.1669	0.9099	1.0000	1.0000	1.0000	1.0000	1.0000
20 US	0.0677	0.0824	0.2154	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
50 US	0.0356	0.0551	0.2303	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100 US	0.0130	0.0271	0.1547	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
200 US	0.0021	0.0067	0.0482	0.4621	1.0000	1.0000	1.0000	0.8539	0.9885
500 US	0.0000	0.0002	0.0020	0.0193	0.1850	1.0000	0.5249	0.8996	1.0000
1 MS	0.0000	0.0000	0.0002	0.0022	0.0215	0.1607	0.6288	0.9486	1.0000
2 MS	0.0000	0.0000	0.0005	0.0045	0.0439	0.3321	0.8717	0.9922	1.0000
5 MS	0.0000	0.0003	0.0027	0.0268	0.2351	0.9012	0.9579	1.0000	1.0000
10 MS	0.0000	0.0008	0.0076	0.0738	0.5337	0.9989	1.0000	1.0000	1.0000
20 MS	0.0000	0.0015	0.0175	0.1619	0.8277	0.9998	1.0000	1.0000	1.0000
50 MS	0.0000	0.0047	0.0464	0.3778	0.9894	0.9998	1.0000	1.0000	1.0000
100 MS	0.0000	0.0096	0.0922	0.5186	0.9978	1.0000	1.0000	1.0000	1.0000
200 MS	0.0000	0.0192	0.1761	0.8500	0.9980	1.0000	1.0000	1.0000	1.0000
500 MS	0.0000	0.0465	0.3770	0.9770	0.9984	1.0000	1.0000	1.0000	1.0000
1 S	0.0000	0.0887	0.5960	0.9877	0.9992	1.0000	1.0000	1.0000	1.0000
2 S	0.0000	0.1655	0.8147	0.9937	1.0000	1.0000	1.0000	1.0000	1.0000
5 S	0.0000	0.3665	0.9765	0.9992	1.0000	1.0000	1.0000	1.0000	1.0000
10 S	0.0000	0.6121	0.9991	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

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# THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-06 K01= 9.0000E-02 K02= 9.0000E-07  
DELTA= 1.0000E+00 TD1= 7.0000E-04 TD2= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+03 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CHARGING

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)					CHARGING				
	INF	10 SEC	1 SEC	100 MS	10 MS	1 US	10 US	100 US	1 MS	10 MS
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054
1 US	0.1031	0.1042	0.1141	0.2131	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
2 US	0.1008	0.1008	0.1009	0.1014	0.1067	0.1597	0.6798	1.0000	1.0000	1.0000
3 US	0.0943	0.0948	0.1000	0.1520	0.6712	0.9999	1.0000	1.0000	1.0000	1.0000
10 US	0.0843	0.0926	0.1669	0.9098	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
20 US	0.0677	0.0824	0.2154	0.9927	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
50 US	0.0356	0.0551	0.2303	0.9927	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
100 US	0.0130	0.0271	0.1547	0.9927	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
200 US	0.0021	0.0067	0.0492	0.9927	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
500 US	0.0000	0.0002	0.0020	0.9927	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
1 MS	0.0000	0.0000	0.0002	0.9927	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
2 MS	0.0000	0.0000	0.0000	0.9927	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
5 MS	0.0000	0.0000	0.0000	0.9927	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
10 MS	0.0000	0.0000	0.0000	0.9927	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
20 MS	0.0000	0.0000	0.0000	0.9927	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
50 MS	0.0000	0.0000	0.0000	0.9927	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
100 MS	0.0000	0.0000	0.0000	0.9927	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
200 MS	0.0000	0.0000	0.0000	0.9927	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
500 MS	0.0000	0.0000	0.0000	0.9927	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
1 S	0.0000	0.0000	0.0000	0.9927	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
2 S	0.0000	0.0000	0.0000	0.9927	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
5 S	0.0000	0.0000	0.0000	0.9927	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
10 S	0.0000	0.0000	0.0000	0.9927	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000

10<sup>13</sup>, 10<sup>3</sup>



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-06 KD1= 9.0000E-02 KD2= 9.0000E-07  
DELTA= 1.0000E+00 TD1= 7.0000E-04 TD2= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+13 RAD/SEC FOR 2.5000E-04 SEC  
FOLLOWED BY A CONSTAN. RATE CF 1.0000E+04 RAD/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	10C MS	1C MS	1 MS	100 US	10 US	1 US	
1C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 NS	0.1054	0.1054	C.1C54	C.1C54	0.1054	0.1054	0.1C54	0.1061	0.1127	
1 US	0.1031	0.1042	C.1141	C.2130	0.9927	0.9993	0.9999	1.0000	1.0000	
2 US	0.1008	0.1009	0.1009	C.1C14	0.1067	0.1597	0.6796	1.0000	1.0000	
5 US	0.0943	0.0943	C.1000	C.1520	0.6711	0.9993	0.9999	1.0000	1.0000	
1C US	0.0843	0.0925	C.1669	C.9095	0.9927	0.9993	0.9999	1.0000	1.0000	
2C US	0.0677	0.0824	0.2154	C.9317	0.9927	0.9993	0.9999	1.0000	0.9789	
5C US	0.0356	0.0551	0.2302	C.9317	0.9927	0.9993	0.9999	1.0000	0.9795	
10C US	0.0130	0.0271	0.1546	C.9317	0.9927	0.9993	0.9999	1.0000	0.9812	
20C US	0.0021	0.0067	0.0482	C.4619	0.9927	0.9993	0.9999	0.8539	0.9885	
50C US	0.0000	0.0002	C.0C20	C.0193	0.1849	0.9993	0.5848	0.8996	1.0000	
1 MS	0.0000	0.0000	C.0C02	C.0C22	0.0215	0.1606	0.6288	0.9486	1.0000	
2 MS	0.0000	0.0000	0.0C05	C.0C45	0.0435	0.3321	0.8716	0.9922	1.0000	
5 MS	0.0000	0.0003	C.0027	C.0C267	0.2349	0.9007	0.9579	1.0000	1.0000	
1C MS	0.0000	0.0003	C.0C76	C.0C736	0.5324	0.9982	0.9999	1.0000	1.0000	
2C MS	0.0000	0.0018	0.0174	C.1609	0.8239	0.9991	0.9999	1.0000	1.0000	
5C MS	0.0000	0.0047	C.0456	C.3719	0.9827	0.9991	0.9999	1.0000	1.0000	
10C MS	0.0000	0.0093	C.0891	C.6007	0.9907	0.9993	0.9999	1.0000	1.0000	
20C MS	0.0000	0.0179	C.1646	C.8101	0.9909	0.9993	0.9999	1.0000	1.0000	
50C MS	0.0000	0.0393	0.3222	C.9139	0.9912	0.9993	0.9999	1.0000	1.0000	
1 S	0.0000	0.0641	C.4531	C.9217	0.9920	0.9993	0.9999	1.0000	1.0000	
2 S	0.0000	0.0916	C.5374	C.9265	0.9927	0.9993	0.9999	1.0000	1.0000	
5 S	0.0000	0.1157	C.5728	C.9310	0.9927	0.9993	0.9999	1.0000	1.0000	
1C S	0.0000	0.1198	0.5767	C.9317	0.9927	0.9993	0.9999	1.0000	1.0000	

10<sup>13</sup>, 10<sup>4</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-05 K01= 9.0000E-C2 K02= 9.0000E-07  
DELTA= 1.0000E+00 TD1= 7.0000E-04 TD2= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+05 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	INF	TAU (TIME CONSTANT)					10 US	100 US	1 MS	10 MS	100 MS	1 US
		10 SEC	1 SEC	10C MS	1C MS	1 MS						
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1061	0.1054	0.1054	0.1054	0.1054	0.1127
1 US	0.1031	0.1042	0.1140	0.2126	0.9317	0.9927	0.9999	0.9993	0.9927	0.9993	0.9999	1.0000
2 US	0.1008	0.1008	0.1009	0.1014	0.1067	0.1596	0.9999	0.6783	0.1596	0.9993	0.9999	1.0000
5 US	0.0943	0.0948	0.1000	0.1512	0.6691	0.9927	0.9999	0.9993	0.9927	0.9993	0.9999	1.0000
10 US	0.0843	0.0925	0.1200	0.3769	0.9317	0.9927	0.9999	0.9993	0.9927	0.9993	0.9999	1.0000
20 US	0.0677	0.0824	0.1200	0.5769	0.9317	0.9927	0.9999	0.9993	0.9927	0.9993	0.9999	0.9789
50 US	0.0356	0.0550	0.1200	0.5769	0.9317	0.9927	0.9999	0.9993	0.9927	0.9993	0.9999	0.9795
100 US	0.0130	0.0271	0.1200	0.5769	0.9317	0.9927	0.9999	0.9993	0.9927	0.9993	0.9999	0.9812
200 US	0.0021	0.0067	0.0480	0.4599	0.9317	0.9927	0.9999	0.9993	0.9927	0.9993	0.9999	0.9885
500 US	0.0000	0.0002	0.0020	0.0192	0.1839	0.9927	0.9999	0.9993	0.9927	0.9993	0.9999	1.0000
1 MS	0.0000	0.0000	0.0002	0.0022	0.213	0.1604	0.9999	0.9993	0.9927	0.9993	0.9999	1.0000
2 MS	0.0000	0.0000	0.0005	0.0045	0.0438	0.3315	0.9999	0.9993	0.9927	0.9993	0.9999	1.0000
5 MS	0.0000	0.0003	0.0027	0.0265	0.2328	0.8961	0.9999	0.9993	0.9927	0.9993	0.9999	1.0000
10 MS	0.0000	0.0007	0.0074	0.0718	0.5209	0.9918	0.9999	0.9993	0.9927	0.9993	0.9999	1.0000
20 MS	0.0000	0.0017	0.0164	0.1522	0.7911	0.9926	0.9999	0.9993	0.9927	0.9993	0.9999	1.0000
50 MS	0.0000	0.0040	0.0393	0.3241	0.9254	0.9927	0.9999	0.9993	0.9927	0.9993	0.9999	1.0000
100 MS	0.0000	0.0069	0.0666	0.4496	0.9309	0.9927	0.9999	0.9993	0.9927	0.9993	0.9999	1.0000
200 MS	0.0000	0.0103	0.0964	0.5559	0.9310	0.9927	0.9999	0.9993	0.9927	0.9993	0.9999	1.0000
500 MS	0.0000	0.0130	0.1172	0.5745	0.9311	0.9927	0.9999	0.9993	0.9927	0.9993	0.9999	1.0000
1 S	0.0000	0.0134	0.1192	0.5753	0.9317	0.9927	0.9999	0.9993	0.9927	0.9993	0.9999	1.0000
2 S	0.0000	0.0134	0.1196	0.5761	0.9317	0.9927	0.9999	0.9993	0.9927	0.9993	0.9999	1.0000
5 S	0.0000	0.0134	0.1199	0.5769	0.9317	0.9927	0.9999	0.9993	0.9927	0.9993	0.9999	1.0000
10 S	0.0000	0.0134	0.1200	0.5769	0.9317	0.9927	0.9999	0.9993	0.9927	0.9993	0.9999	1.0000

10<sup>13</sup>, 10<sup>5</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-06 K01= 9.0000E-02 K02= 9.0000E-07  
- DELTA= 1.0000E+00 T01= 7.0000E-04 T02= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+06 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	INF	TAU (TIME CONSTANT)					10 US	100 US	1 MS	10 MS	100 MS	1 S	10 S	100 S	1 US
		10 SEC	1 SEC	10C MS	10 MS	1 MS									
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054
1 US	0.1031	0.1041	0.1136	0.2083	0.5769	0.9317	0.9993	0.9927	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
2 US	0.1008	0.1008	0.1009	0.1014	0.1065	0.1582	0.9993	0.6648	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
5 US	0.0942	0.0948	0.0998	0.1200	0.5769	0.9317	0.9993	0.9927	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
10 US	0.0843	0.0922	0.1633	0.1200	0.5769	0.9317	0.9993	0.9927	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
20 US	0.0676	0.0818	0.2090	0.1200	0.5769	0.9317	0.9993	0.9927	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
50 US	0.0356	0.0542	0.2218	0.1200	0.5769	0.9317	0.9993	0.9927	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
100 US	0.0129	0.0265	0.1484	0.1200	0.5769	0.9317	0.9993	0.9927	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
200 US	0.0021	0.0065	0.0460	0.1200	0.5769	0.9317	0.9993	0.9927	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
500 US	0.0000	0.0002	0.0019	0.1200	0.5769	0.9317	0.9993	0.9927	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
1 MS	0.0000	0.0000	0.0002	0.1200	0.5769	0.9317	0.9993	0.9927	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
2 MS	0.0000	0.0000	0.0004	0.1200	0.5769	0.9317	0.9993	0.9927	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
5 MS	0.0000	0.0002	0.0024	0.1200	0.5769	0.9317	0.9993	0.9927	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
10 MS	0.0000	0.0006	0.0059	0.1200	0.5769	0.9317	0.9993	0.9927	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
20 MS	0.0000	0.0010	0.0099	0.1200	0.5769	0.9317	0.9993	0.9927	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
50 MS	0.0000	0.0013	0.0132	0.1200	0.5769	0.9317	0.9993	0.9927	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
100 MS	0.0000	0.0014	0.0134	0.1200	0.5769	0.9317	0.9993	0.9927	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
200 MS	0.0000	0.0014	0.0134	0.1200	0.5769	0.9317	0.9993	0.9927	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
500 MS	0.0000	0.0014	0.0134	0.1200	0.5769	0.9317	0.9993	0.9927	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
1 S	0.0000	0.0014	0.0134	0.1200	0.5769	0.9317	0.9993	0.9927	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
2 S	0.0000	0.0014	0.0134	0.1200	0.5769	0.9317	0.9993	0.9927	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
5 S	0.0000	0.0014	0.0134	0.1200	0.5769	0.9317	0.9993	0.9927	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
10 S	0.0000	0.0014	0.0134	0.1200	0.5769	0.9317	0.9993	0.9927	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993

10<sup>13</sup>, 10<sup>6</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A TANTALUM OXIDE CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 9.0000E-06 KD1= 9.0000E-02 KD2= 9.0000E-07  
DELTA= 1.0000E+00 TD1= 7.0000E-04 TD2= 1.5000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+07 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	INF	TAU (TIME CONSTANT)						10 US	100 US	1 MS	100 US	10 US	1 US
		10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US						
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054	0.1054
1 US	0.1031	0.1031	0.1031	0.1031	0.1031	0.1031	0.1031	0.1031	0.1031	0.1031	0.1031	0.1031	0.1031
2 US	0.1008	0.1008	0.1008	0.1008	0.1008	0.1008	0.1008	0.1008	0.1008	0.1008	0.1008	0.1008	0.1008
5 US	0.0942	0.0942	0.0942	0.0942	0.0942	0.0942	0.0942	0.0942	0.0942	0.0942	0.0942	0.0942	0.0942
10 US	0.0842	0.0842	0.0842	0.0842	0.0842	0.0842	0.0842	0.0842	0.0842	0.0842	0.0842	0.0842	0.0842
20 US	0.0675	0.0675	0.0675	0.0675	0.0675	0.0675	0.0675	0.0675	0.0675	0.0675	0.0675	0.0675	0.0675
50 US	0.0354	0.0354	0.0354	0.0354	0.0354	0.0354	0.0354	0.0354	0.0354	0.0354	0.0354	0.0354	0.0354
100 US	0.0128	0.0128	0.0128	0.0128	0.0128	0.0128	0.0128	0.0128	0.0128	0.0128	0.0128	0.0128	0.0128
200 US	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
500 US	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1 MS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2 MS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5 MS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
10 MS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
20 MS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
50 MS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
100 MS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
200 MS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
500 MS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
10 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

10<sup>13</sup>, 10<sup>7</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MIÇA CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 2.0000E-05 K01= 0.0000E+00 K02= 3.0000E-06  
DELTA= 8.3000E-01 T01= 1.0000E+10 T02= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 0.0000E+00 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	C	INF	TAU (TIME CONSTANT)						10 US	100 US	1 MS	1 US	1 US
			10 SEC	1 SEC	100 MS	1C MS	1 MS	100 US					
25	NS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1	US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
2	US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
5	US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
10	US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
20	US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
50	US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
100	US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
200	US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
500	US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
1	MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
2	MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
5	MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
10	MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
20	MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
50	MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
100	MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
200	MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
500	MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
1	S	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
2	S	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
5	S	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
10	S	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MIÇA CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
KP= 2.0000E-05 K01= 0.0000E+00 K02= 3.0000E-06  
DELTA= 0.3000E-01 TD1= 1.0000E+10 TD2= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+03 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
1 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000
2 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000
5 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000
10 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000	1.0000
20 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000	1.0000
50 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000	1.0000
100 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000	1.0000	1.0000
200 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000	1.0000	1.0000
500 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000	1.0000	1.0000
1 MS	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000	1.0000	1.0000	1.0000
2 MS	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000	1.0000	1.0000	1.0000
5 MS	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000	1.0000	1.0000	1.0000
10 MS	0.9998	0.9999	0.9998	0.9999	0.9999	1.0000	1.0000	1.0000	1.0000
20 MS	0.9998	0.9999	0.9998	0.9999	0.9999	1.0000	1.0000	1.0000	1.0000
50 MS	0.9996	0.9999	0.9996	0.9999	0.9999	1.0000	1.0000	1.0000	1.0000
100 MS	0.9993	0.9993	0.9993	0.9999	0.9999	1.0000	1.0000	1.0000	1.0000
200 MS	0.9986	0.9987	0.9986	0.9999	0.9999	1.0000	1.0000	1.0000	1.0000
500 MS	0.9967	0.9968	0.9974	0.9999	0.9999	1.0000	1.0000	1.0000	1.0000
1 S	0.9934	0.9937	0.9958	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
2 S	0.9864	0.9877	0.9940	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
5 S	0.9651	0.9724	0.9928	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
10 S	0.9301	0.9553	0.9927	0.9996	0.9999	1.0000	1.0000	1.0000	1.0000



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MIÇA CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 2.0000E-05 K01= 0.0000E+00 K02= 3.0000E-06  
DELTA= 8.3000E-01 T01= 1.0000E+10 T02= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+04 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
1 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
2 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
5 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
10 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
20 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
50 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
100 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
200 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
500 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
1 MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
2 MS	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
5 MS	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997
10 MS	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995
20 MS	0.9991	0.9991	0.9991	0.9991	0.9991	0.9991	0.9991
50 MS	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978	0.9978
100 MS	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957
200 MS	0.9915	0.9915	0.9915	0.9915	0.9915	0.9915	0.9915
500 MS	0.9785	0.9785	0.9785	0.9785	0.9785	0.9785	0.9785
1 S	0.9566	0.9566	0.9566	0.9566	0.9566	0.9566	0.9566
2 S	0.9124	0.9124	0.9124	0.9124	0.9124	0.9124	0.9124
5 S	0.7871	0.7871	0.7871	0.7871	0.7871	0.7871	0.7871
10 S	0.6133	0.6133	0.6133	0.6133	0.6133	0.6133	0.6133

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MICR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 2.0000E-05 K11= 0.0000E+00 K02= 3.0000E-06  
DELTA= 8.3000E-01 T01= 1.0000E+10 T02= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-06 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+05 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	INF	TAU (TIME CONSTANT)					1 MS	100 US	10 US	1 US
		10 SEC	1 SEC	100 MS	10 MS	1 MS				
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
1 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000
2 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000
5 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000
10 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000
20 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000	1.0000
50 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000	1.0000
100 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000	1.0000
200 US	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	1.0000	1.0000	1.0000
500 US	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	1.0000	1.0000	1.0000
1 MS	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	1.0000	1.0000	1.0000
2 MS	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	1.0000	1.0000	1.0000
5 MS	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	1.0000	1.0000	1.0000
10 MS	0.9971	0.9971	0.9971	0.9971	0.9971	0.9971	0.9971	1.0000	1.0000	1.0000
20 MS	0.9943	0.9943	0.9943	0.9943	0.9943	0.9943	0.9943	1.0000	1.0000	1.0000
50 MS	0.9858	0.9859	0.9862	0.9889	0.9972	0.9997	0.9997	1.0000	1.0000	1.0000
100 MS	0.9710	0.9720	0.9732	0.9822	0.9971	0.9997	0.9997	1.0000	1.0000	1.0000
200 MS	0.9442	0.9448	0.9494	0.9756	0.9971	0.9997	0.9997	1.0000	1.0000	1.0000
500 MS	0.8641	0.8674	0.8922	0.9713	0.9970	0.9997	0.9997	1.0000	1.0000	1.0000
1 S	0.7414	0.7531	0.8312	0.9699	0.9972	0.9997	0.9997	1.0000	1.0000	1.0000
2 S	0.5384	0.5765	0.7757	0.9685	0.9966	0.9997	0.9997	1.0000	1.0000	1.0000
5 S	0.1983	0.3248	0.7494	0.9675	0.9966	0.9997	0.9997	1.0000	1.0000	1.0000
10 S	0.0367	0.2394	0.7476	0.9677	0.9966	0.9997	0.9997	1.0000	1.0000	1.0000

10<sup>10</sup>, 10<sup>5</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MICA CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 2.0000E-05 KD1= 0.0000E+00 KD2= 3.0000E-06  
DELTA= 0.3000E-01 TD1= 1.0000E+10 TD2= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-02 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+06 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
1 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
2 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
5 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
10 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
20 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
50 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
100 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
200 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
500 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
1 MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
2 MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
5 MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
10 MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
20 MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
50 MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
100 MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
200 MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
500 MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
1 S	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
2 S	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
5 S	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
10 S	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MIÇA CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 2.0000E-05 KN1= 0.0000E+00 KD2= 3.0000E-06  
DELTA= 8.3000E-01 TD1= 1.0000E+10 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+10 RAD/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+07 RAD/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
1 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
2 US	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
5 US	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
10 US	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
20 US	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996
50 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
100 US	0.9986	0.9986	0.9986	0.9986	0.9986	0.9986	0.9986
200 US	0.9973	0.9973	0.9973	0.9973	0.9973	0.9973	0.9973
500 US	0.9935	0.9935	0.9935	0.9935	0.9935	0.9935	0.9935
1 MS	0.9871	0.9871	0.9871	0.9871	0.9871	0.9871	0.9871
2 MS	0.9744	0.9744	0.9744	0.9744	0.9744	0.9744	0.9744
5 MS	0.9374	0.9374	0.9374	0.9374	0.9374	0.9374	0.9374
10 MS	0.8787	0.8787	0.8787	0.8787	0.8787	0.8787	0.8787
20 MS	0.7720	0.7720	0.7720	0.7720	0.7720	0.7720	0.7720
50 MS	0.5230	0.5230	0.5230	0.5230	0.5230	0.5230	0.5230
100 MS	0.2723	0.2723	0.2723	0.2723	0.2723	0.2723	0.2723
200 MS	0.0728	0.0728	0.0728	0.0728	0.0728	0.0728	0.0728
500 MS	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
1 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
10 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

10<sup>10</sup>, 10<sup>7</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MICA CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 2.0000E-05 KC1= 0.0000E+00 KD2= 3.0000E-06  
DELTA= 8.3000E-01 TD1= 1.0000E+10 TD2= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+11 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 0.0000E+00 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
1 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9997
2 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9999
5 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9996	1.0000
10 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9998	1.0000
20 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9999	1.0000
50 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9996	1.0000	1.0000
100 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9998	1.0000	1.0000
200 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9999	1.0000	1.0000
500 US	0.9993	0.9993	0.9993	0.9993	0.9994	0.9996	1.0000	1.0000	1.0000
1 MS	0.9993	0.9993	0.9993	0.9993	0.9994	0.9998	1.0000	1.0000	1.0000
2 MS	0.9993	0.9993	0.9993	0.9993	0.9994	0.9999	1.0000	1.0000	1.0000
5 MS	0.9993	0.9993	0.9993	0.9994	0.9996	1.0000	1.0000	1.0000	1.0000
10 MS	0.9993	0.9993	0.9993	0.9994	0.9998	1.0000	1.0000	1.0000	1.0000
20 MS	0.9993	0.9993	0.9993	0.9994	0.9999	1.0000	1.0000	1.0000	1.0000
50 MS	0.9993	0.9993	0.9994	0.9996	1.0000	1.0000	1.0000	1.0000	1.0000
100 MS	0.9993	0.9993	0.9994	0.9997	1.0000	1.0000	1.0000	1.0000	1.0000
200 MS	0.9993	0.9993	0.9994	0.9999	1.0000	1.0000	1.0000	1.0000	1.0000
500 MS	0.9993	0.9993	0.9996	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1 S	0.9993	0.9993	0.9996	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2 S	0.9993	0.9993	0.9997	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
5 S	0.9992	0.9994	0.9999	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10 S	0.9992	0.9995	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100 S	0.9992	0.9997	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

10", 0

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MICA CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 2.0000E-05 KC1= 0.0000E+00 KD2= 3.0000E-06  
DELTA= 8.3000E-01 TD1= 1.0000E+10 TD2= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+11 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+03 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
1 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9997
2 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9999
5 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9996	1.0000
10 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9998	1.0000
20 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9999	1.0000	1.0000
50 US	0.9993	0.9993	0.9993	0.9993	0.9994	0.9996	1.0000	1.0000	1.0000
100 US	0.9993	0.9993	0.9993	0.9993	0.9994	0.9997	1.0000	1.0000	1.0000
200 US	0.9993	0.9993	0.9993	0.9993	0.9994	0.9999	1.0000	1.0000	1.0000
500 US	0.9993	0.9993	0.9993	0.9993	0.9994	0.9999	1.0000	1.0000	1.0000
1 MS	0.9993	0.9993	0.9993	0.9993	0.9994	0.9999	1.0000	1.0000	1.0000
2 MS	0.9993	0.9993	0.9993	0.9993	0.9994	0.9999	1.0000	1.0000	1.0000
5 MS	0.9993	0.9993	0.9993	0.9993	0.9996	1.0000	1.0000	1.0000	1.0000
10 MS	0.9993	0.9993	0.9993	0.9993	0.9997	1.0000	1.0000	1.0000	1.0000
20 MS	0.9992	0.9992	0.9992	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
50 MS	0.9990	0.9990	0.9991	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
100 MS	0.9987	0.9987	0.9990	0.9994	0.9999	1.0000	1.0000	1.0000	1.0000
200 MS	0.9981	0.9981	0.9983	0.9994	0.9999	1.0000	1.0000	1.0000	1.0000
500 MS	0.9961	0.9962	0.9970	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
1 S	0.9927	0.9931	0.9956	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
2 S	0.9858	0.9871	0.9939	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
5 S	0.9644	0.9720	0.9928	0.9993	0.9999	1.0000	1.0000	1.0000	1.0000
10 S	0.9295	0.9551	0.9927	0.9996	0.9999	1.0000	1.0000	1.0000	1.0000

10", 10<sup>3</sup>



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MICA CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 2.0000E-05 K01= 0.0000E+00 K02= 3.0000E-06  
DELTA= 8.3000E-01 T01= 1.0000E+10 T02= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+11 RAD/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+04 RAD/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	INF	TAU (TIME CONSTANT)						10 US	100 US	1 MS	10 MS	1 US	1 US
		10 SEC	1 SEC	10C MS	1C MS	1 MS	10C US						
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
1 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
2 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
5 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
10 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
20 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
50 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
100 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
200 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
500 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
1 MS	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
2 MS	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992
5 MS	0.9991	0.9991	0.9991	0.9991	0.9991	0.9991	0.9991	0.9991	0.9991	0.9991	0.9991	0.9991	0.9991
10 MS	0.9989	0.9989	0.9989	0.9989	0.9989	0.9989	0.9989	0.9989	0.9989	0.9989	0.9989	0.9989	0.9989
20 MS	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985
50 MS	0.9972	0.9972	0.9972	0.9972	0.9972	0.9972	0.9972	0.9972	0.9972	0.9972	0.9972	0.9972	0.9972
100 MS	0.9951	0.9951	0.9951	0.9951	0.9951	0.9951	0.9951	0.9951	0.9951	0.9951	0.9951	0.9951	0.9951
200 MS	0.9909	0.9909	0.9909	0.9909	0.9909	0.9909	0.9909	0.9909	0.9909	0.9909	0.9909	0.9909	0.9909
500 MS	0.9779	0.9779	0.9779	0.9779	0.9779	0.9779	0.9779	0.9779	0.9779	0.9779	0.9779	0.9779	0.9779
1 S	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560
2 S	0.9113	0.9113	0.9113	0.9113	0.9113	0.9113	0.9113	0.9113	0.9113	0.9113	0.9113	0.9113	0.9113
5 S	0.7865	0.7865	0.7865	0.7865	0.7865	0.7865	0.7865	0.7865	0.7865	0.7865	0.7865	0.7865	0.7865
10 S	0.6129	0.6129	0.6129	0.6129	0.6129	0.6129	0.6129	0.6129	0.6129	0.6129	0.6129	0.6129	0.6129

10<sup>11</sup> / C<sup>4</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MICA CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
KP= 2.0000E-05 K01= 0.0000E+00 K02= 3.0000E-06  
DELTA= 0.3000E-01 T01= 1.0000E+10 T02= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+11 RAD/S/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+05 RAD/S/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 NS	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	
1 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9997	
2 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9999	
5 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9996	1.0000	
10 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9997	1.0000	
20 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9999	1.0000	
50 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9996	1.0000	1.0000	
100 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9997	1.0000	1.0000	
200 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9999	1.0000	1.0000	
500 US	0.9992	0.9992	0.9992	0.9992	0.9992	0.9995	1.0000	1.0000	1.0000	
1 MS	0.9990	0.9990	0.9990	0.9991	0.9991	0.9996	1.0000	1.0000	1.0000	
2 MS	0.9988	0.9988	0.9988	0.9988	0.9989	0.9997	1.0000	1.0000	1.0000	
5 MS	0.9979	0.9979	0.9979	0.9980	0.9985	0.9997	1.0000	1.0000	1.0000	
10 MS	0.9965	0.9965	0.9965	0.9967	0.9980	0.9997	1.0000	1.0000	1.0000	
20 MS	0.9937	0.9937	0.9938	0.9943	0.9975	0.9997	1.0000	1.0000	1.0000	
50 MS	0.9853	0.9853	0.9856	0.9885	0.9972	0.9997	1.0000	1.0000	1.0000	
100 MS	0.9713	0.9714	0.9727	0.9820	0.9971	0.9997	1.0000	1.0000	1.0000	
200 MS	0.9436	0.9442	0.9489	0.9755	0.9971	0.9997	1.0000	1.0000	1.0000	
500 MS	0.8636	0.8669	0.8919	0.9713	0.9970	0.9997	1.0000	1.0000	1.0000	
1 S	0.7409	0.7526	0.8310	0.9499	0.9972	0.9997	1.0000	1.0000	1.0000	
2 S	0.5381	0.5762	0.7767	0.9685	0.9966	0.9997	1.0000	1.0000	1.0000	
5 S	0.1982	0.3248	0.7494	0.9675	0.9966	0.9997	1.0000	1.0000	1.0000	
10 S	0.0367	0.2394	0.7476	0.9677	0.9966	0.9997	1.0000	1.0000	1.0000	

10", 10S

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MICA CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 2.0000E-05 KD1= 0.0000E+00 KD2= 3.0000E-06  
DELTA= 8.3000E-01 TD1= 1.0000E+10 TD2= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+11 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+06 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	INF	TAU (TIME CONSTANT)						10 US	1 US	1 US
		10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US			
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
1 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9997	0.9997
2 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	0.9999	0.9999
3 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9994	1.0000	1.0000
10 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9997	1.0000	1.0000
20 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9999	1.0000	1.0000
50 US	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	1.0000	1.0000	1.0000
100 US	0.9991	0.9991	0.9991	0.9991	0.9991	0.9991	0.9991	1.0000	1.0000	1.0000
200 US	0.9989	0.9989	0.9989	0.9989	0.9989	0.9989	0.9989	1.0000	1.0000	1.0000
500 US	0.9984	0.9984	0.9984	0.9984	0.9984	0.9984	0.9984	1.0000	1.0000	1.0000
1 MS	0.9974	0.9974	0.9974	0.9974	0.9974	0.9974	0.9974	1.0000	1.0000	1.0000
2 MS	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	1.0000	1.0000	1.0000
3 MS	0.9898	0.9898	0.9898	0.9898	0.9898	0.9898	0.9898	1.0000	1.0000	1.0000
10 MS	0.9804	0.9804	0.9804	0.9804	0.9804	0.9804	0.9804	1.0000	1.0000	1.0000
20 MS	0.9618	0.9618	0.9618	0.9618	0.9618	0.9618	0.9618	1.0000	1.0000	1.0000
50 MS	0.9080	0.9080	0.9080	0.9080	0.9080	0.9080	0.9080	1.0000	1.0000	1.0000
100 MS	0.8244	0.8244	0.8244	0.8244	0.8244	0.8244	0.8244	1.0000	1.0000	1.0000
200 MS	0.6783	0.6783	0.6783	0.6783	0.6783	0.6783	0.6783	1.0000	1.0000	1.0000
500 MS	0.3726	0.3726	0.3726	0.3726	0.3726	0.3726	0.3726	1.0000	1.0000	1.0000
1 S	0.1322	0.1322	0.1322	0.1322	0.1322	0.1322	0.1322	1.0000	1.0000	1.0000
2 S	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152	1.0000	1.0000	1.0000
5 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	1.0000	1.0000
10 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	1.0000	1.0000

10, 10

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MICA CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 2.0000E-05 KD1= 0.0000E+00 KD2= 3.0000E-06  
DELTA= 8.3000E-01 TD1= 1.0000E+10 TC2= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+11 RAD/S/SEC FOR 2.5000E-06 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+07 RAD/S/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	10C MS	1C MS	1 MS	100 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
1 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
2 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
5 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
10 US	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992
20 US	0.9991	0.9991	0.9991	0.9991	0.9991	0.9991	0.9991
50 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987
100 US	0.9980	0.9980	0.9980	0.9980	0.9980	0.9980	0.9980
200 US	0.9967	0.9967	0.9967	0.9967	0.9967	0.9967	0.9967
500 US	0.9929	0.9929	0.9929	0.9929	0.9929	0.9929	0.9929
1 MS	0.9865	0.9865	0.9865	0.9865	0.9865	0.9865	0.9865
2 MS	0.9738	0.9738	0.9738	0.9738	0.9738	0.9738	0.9738
5 MS	0.9368	0.9368	0.9368	0.9368	0.9368	0.9368	0.9368
10 MS	0.8782	0.8782	0.8782	0.8782	0.8782	0.8782	0.8782
20 MS	0.7716	0.7716	0.7716	0.7716	0.7716	0.7716	0.7716
50 MS	0.5227	0.5227	0.5227	0.5227	0.5227	0.5227	0.5227
100 MS	0.2721	0.2721	0.2721	0.2721	0.2721	0.2721	0.2721
200 MS	0.0728	0.0728	0.0728	0.0728	0.0728	0.0728	0.0728
500 MS	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
1 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
10 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

10, 10

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MICA CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 2.0000E-05 KD1= 0.0000E+00 KD2= 3.0000E-06  
DELTA= 8.3000E-01 TD1= 1.0000E+10 TD2= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-04 SEC  
FOLLOWED BY A CONSTANT RATE OF 0.0000E+00 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955
1 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9959	0.9983
2 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9963	0.9994
5 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9957	0.9972	1.0000
10 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9959	0.9983	1.0000
20 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9963	0.9994	1.0000
50 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9957	0.9972	1.0000	1.0000
100 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9959	0.9983	1.0000	1.0000
200 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9963	0.9994	1.0000	1.0000
500 US	0.9955	0.9955	0.9955	0.9955	0.9957	0.9972	1.0000	1.0000	1.0000
1 MS	0.9954	0.9955	0.9955	0.9955	0.9959	0.9983	1.0000	1.0000	1.0000
2 MS	0.9954	0.9955	0.9955	0.9955	0.9963	0.9994	1.0000	1.0000	1.0000
5 MS	0.9954	0.9954	0.9955	0.9957	0.9972	1.0000	1.0000	1.0000	1.0000
10 MS	0.9954	0.9954	0.9955	0.9959	0.9983	1.0000	1.0000	1.0000	1.0000
20 MS	0.9954	0.9954	0.9955	0.9963	0.9994	1.0000	1.0000	1.0000	1.0000
50 MS	0.9954	0.9954	0.9956	0.9972	1.0000	1.0000	1.0000	1.0000	1.0000
100 MS	0.9954	0.9954	0.9958	0.9983	1.0000	1.0000	1.0000	1.0000	1.0000
200 MS	0.9953	0.9954	0.9962	0.9993	1.0000	1.0000	1.0000	1.0000	1.0000
500 MS	0.9952	0.9954	0.9970	0.9999	1.0000	1.0000	1.0000	1.0000	1.0000
1 S	0.9950	0.9954	0.9980	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2 S	0.9948	0.9957	0.9991	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
5 S	0.9946	0.9966	0.9999	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10 S	0.9946	0.9980	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MICA CAPACITOR

## THE CAPACITOR PARAMETERS USED ARE:

KP= 2.0000E-05 K01= 0.0000E+00 K02= 3.0000E-06  
DELTA= 8.3000E-01 T01= 1.0000E+10 T02= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-04 SEC FOLLOWED BY A CONSTANT RATE OF 1.0000E+03 RADS/SEC

$\tau$  IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)					1 MS	100 US	10 US	1 US
	INF	10 SEC	1 SEC	10C MS	1C MS				
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955
1 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9959	0.9983
2 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9963	0.9994
5 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9957	0.9972	1.0000
10 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9959	0.9983	1.0000
20 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9963	0.9994	1.0000
50 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9957	0.9972	1.0000	1.0000
100 US	0.9954	0.9954	0.9955	0.9955	0.9955	0.9959	0.9983	1.0000	1.0000
200 US	0.9954	0.9954	0.9954	0.9955	0.9955	0.9963	0.9994	1.0000	1.0000
500 US	0.9954	0.9954	0.9954	0.9955	0.9955	0.9963	0.9994	1.0000	1.0000
1 MS	0.9954	0.9954	0.9954	0.9955	0.9955	0.9963	0.9994	1.0000	1.0000
2 MS	0.9954	0.9954	0.9954	0.9955	0.9955	0.9963	0.9994	1.0000	1.0000
5 MS	0.9954	0.9954	0.9954	0.9955	0.9955	0.9963	0.9994	1.0000	1.0000
10 MS	0.9954	0.9954	0.9954	0.9955	0.9955	0.9963	0.9994	1.0000	1.0000
20 MS	0.9953	0.9953	0.9954	0.9955	0.9955	0.9963	0.9994	1.0000	1.0000
50 MS	0.9951	0.9951	0.9953	0.9955	0.9955	0.9963	0.9994	1.0000	1.0000
100 MS	0.9948	0.9948	0.9952	0.9953	0.9955	0.9963	0.9994	1.0000	1.0000
200 MS	0.9941	0.9942	0.9950	0.9953	0.9955	0.9963	0.9994	1.0000	1.0000
500 MS	0.9920	0.9923	0.9945	0.9953	0.9955	0.9963	0.9994	1.0000	1.0000
1 S	0.9885	0.9893	0.9939	0.9953	0.9955	0.9963	0.9994	1.0000	1.0000
2 S	0.9814	0.9835	0.9832	0.9953	0.9955	0.9963	0.9994	1.0000	1.0000
5 S	0.9600	0.9692	0.9527	0.9953	0.9955	0.9963	0.9994	1.0000	1.0000
10 S	0.9252	0.9534	0.9927	0.9953	0.9955	0.9963	0.9994	1.0000	1.0000

 $10^{12}, 10^3$



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MIÇA CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 2.0000E-05 K01= 0.0000E+00 K02= 3.0000E-06  
DELTA= 8.3000E-01 T01= 1.0000E+10 T02= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+04 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 NS	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	
1 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9959	0.9983	
2 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9963	0.9994	
5 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9957	0.9972	1.0000	
10 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9959	0.9983	1.0000	
20 US	0.9954	0.9954	0.9954	0.9955	0.9955	0.9955	0.9963	0.9994	1.0000	
50 US	0.9954	0.9954	0.9954	0.9955	0.9955	0.9957	0.9972	1.0000	1.0000	
100 US	0.9954	0.9954	0.9954	0.9955	0.9955	0.9959	0.9983	1.0000	1.0000	
200 US	0.9954	0.9954	0.9954	0.9955	0.9955	0.9963	0.9994	1.0000	1.0000	
500 US	0.9954	0.9954	0.9954	0.9955	0.9957	0.9972	1.0000	1.0000	1.0000	
1 MS	0.9954	0.9954	0.9954	0.9955	0.9958	0.9983	1.0000	1.0000	1.0000	
2 MS	0.9954	0.9954	0.9954	0.9955	0.9962	0.9993	1.0000	1.0000	1.0000	
5 MS	0.9952	0.9952	0.9953	0.9955	0.9971	0.9999	1.0000	1.0000	1.0000	
10 MS	0.9950	0.9950	0.9951	0.9955	0.9981	1.0000	1.0000	1.0000	1.0000	
20 MS	0.9946	0.9946	0.9947	0.9955	0.9990	1.0000	1.0000	1.0000	1.0000	
50 MS	0.9933	0.9934	0.9936	0.9956	0.9995	1.0000	1.0000	1.0000	1.0000	
100 MS	0.9912	0.9913	0.9918	0.9956	0.9995	1.0000	1.0000	1.0000	1.0000	
200 MS	0.9869	0.9871	0.9885	0.9957	0.9995	1.0000	1.0000	1.0000	1.0000	
500 MS	0.9739	0.9747	0.9802	0.9956	0.9995	1.0000	1.0000	1.0000	1.0000	
1 S	0.9519	0.9544	0.9704	0.9954	0.9995	1.0000	1.0000	1.0000	1.0000	
2 S	0.9077	0.9165	0.9601	0.9952	0.9995	1.0000	1.0000	1.0000	1.0000	
5 S	0.7829	0.8273	0.9531	0.9951	0.9995	1.0000	1.0000	1.0000	1.0000	
10 S	0.6101	0.7428	0.9525	0.9954	0.9995	1.0000	1.0000	1.0000	1.0000	

10<sup>-4</sup>, 10<sup>-5</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE

OF A MICA CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 2.0000E-05 KC1= 0.0000E+00 KD2= 3.0000E-06  
DELTA= 8.3000E-01 TC1= 1.0000E+10 TD2= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-04 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+05 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	INF	TAU (TIME CONSTANT)				10 MS	1 MS	100 US	10 US	1 US
		10 SEC	1 SEC	100 MS						
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955
1 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9959	0.9983
2 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9963	0.9994
5 US	0.9954	0.9954	0.9954	0.9954	0.9954	0.9955	0.9955	0.9957	0.9972	1.0000
10 US	0.9954	0.9954	0.9954	0.9954	0.9954	0.9955	0.9955	0.9959	0.9983	1.0000
20 US	0.9954	0.9954	0.9954	0.9954	0.9954	0.9955	0.9955	0.9963	0.9994	1.0000
50 US	0.9954	0.9954	0.9954	0.9954	0.9954	0.9955	0.9955	0.9972	1.0000	1.0000
100 US	0.9954	0.9954	0.9954	0.9954	0.9954	0.9955	0.9955	0.9983	1.0000	1.0000
200 US	0.9954	0.9954	0.9954	0.9954	0.9954	0.9955	0.9955	0.9994	1.0000	1.0000
500 US	0.9953	0.9953	0.9953	0.9953	0.9953	0.9955	0.9971	0.9999	1.0000	1.0000
1 MS	0.9952	0.9952	0.9952	0.9952	0.9952	0.9956	0.9981	1.0000	1.0000	1.0000
2 MS	0.9949	0.9949	0.9949	0.9949	0.9950	0.9958	0.9991	1.0000	1.0000	1.0000
5 MS	0.9940	0.9940	0.9941	0.9943	0.9950	0.9961	0.9997	1.0000	1.0000	1.0000
10 MS	0.9926	0.9926	0.9927	0.9932	0.9943	0.9965	0.9997	1.0000	1.0000	1.0000
20 MS	0.9898	0.9898	0.9900	0.9912	0.9932	0.9966	0.9997	1.0000	1.0000	1.0000
50 MS	0.9814	0.9815	0.9820	0.9862	0.9882	0.9966	0.9997	1.0000	1.0000	1.0000
100 MS	0.9675	0.9676	0.9692	0.9805	0.9866	0.9966	0.9997	1.0000	1.0000	1.0000
200 MS	0.9399	0.9405	0.9458	0.9750	0.9866	0.9966	0.9997	1.0000	1.0000	1.0000
500 MS	0.8600	0.8635	0.8897	0.9712	0.9866	0.9966	0.9997	1.0000	1.0000	1.0000
1 S	0.7377	0.7497	0.8298	0.9699	0.9866	0.9966	0.9997	1.0000	1.0000	1.0000
2 S	0.5357	0.5742	0.7763	0.9685	0.9866	0.9966	0.9997	1.0000	1.0000	1.0000
5 S	0.1972	0.3242	0.7494	0.9675	0.9866	0.9966	0.9997	1.0000	1.0000	1.0000
10 S	0.0365	0.2393	0.7476	0.9677	0.9866	0.9966	0.9997	1.0000	1.0000	1.0000

10<sup>-4</sup>, 10<sup>-5</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MIÇA CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 2.0000E-05 K01= 0.0000E+00 K02= 3.0000E-06  
DELTA= 8.3000E-01 T01= 1.0000E+10 T02= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+06 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF.	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955
1 US	0.9954	0.9954	0.9954	0.9954	0.9954	0.9955	0.9955	0.9959	0.9983
2 US	0.9954	0.9954	0.9954	0.9954	0.9954	0.9955	0.9955	0.9963	0.9994
5 US	0.9954	0.9954	0.9954	0.9954	0.9954	0.9955	0.9957	0.9972	1.0000
10 US	0.9954	0.9954	0.9954	0.9954	0.9954	0.9955	0.9959	0.9983	1.0000
20 US	0.9954	0.9954	0.9954	0.9954	0.9954	0.9955	0.9962	0.9994	1.0000
50 US	0.9954	0.9954	0.9954	0.9954	0.9954	0.9956	0.9972	1.0000	1.0000
100 US	0.9953	0.9953	0.9953	0.9953	0.9953	0.9957	0.9982	1.0000	1.0000
200 US	0.9951	0.9951	0.9951	0.9951	0.9952	0.9959	0.9992	1.0000	1.0000
500 US	0.9945	0.9945	0.9945	0.9945	0.9947	0.9965	0.9998	1.0000	1.0000
1 MS	0.9936	0.9936	0.9936	0.9936	0.9941	0.9971	0.9998	1.0000	1.0000
2 MS	0.9917	0.9917	0.9917	0.9918	0.9928	0.9977	0.9998	1.0000	1.0000
5 MS	0.9860	0.9860	0.9860	0.9864	0.9898	0.9977	0.9998	1.0000	1.0000
10 MS	0.9766	0.9766	0.9767	0.9775	0.9864	0.9977	0.9998	1.0000	1.0000
20 MS	0.9581	0.9581	0.9585	0.9624	0.9831	0.9977	0.9998	1.0000	1.0000
50 MS	0.9044	0.9047	0.9068	0.9252	0.9812	0.9977	0.9998	1.0000	1.0000
100 MS	0.8212	0.8221	0.8297	0.8861	0.9810	0.9977	0.9998	1.0000	1.0000
200 MS	0.6756	0.6786	0.7043	0.8516	0.9808	0.9977	0.9998	1.0000	1.0000
500 MS	0.3710	0.3839	0.4841	0.8325	0.9802	0.9977	0.9998	1.0000	1.0000
1 S	0.1316	0.1600	0.3588	0.8266	0.9797	0.9977	0.9998	1.0000	1.0000
2 S	0.0151	0.0560	0.3161	0.8199	0.9837	0.9977	0.9998	1.0000	1.0000
5 S	0.0000	0.0422	0.3056	0.8148	0.9777	0.9977	0.9998	1.0000	1.0000
10 S	0.0000	0.0420	0.3047	0.8148	0.9777	0.9977	0.9998	1.0000	1.0000

10<sup>12</sup>, 10<sup>6</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MICA CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 2.0000E-05 KJ1= 0.0000E+00 KD2= 3.0000E-06  
DELTA= 8.3000E-01 TD1= 1.0000E+10 TD2= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+07 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955
1 US	0.9954	0.9954	0.9954	0.9954	0.9954	0.9954	0.9955	0.9959	0.9983
2 US	0.9954	0.9954	0.9954	0.9954	0.9954	0.9954	0.9955	0.9962	0.9994
5 US	0.9954	0.9954	0.9954	0.9954	0.9954	0.9954	0.9956	0.9972	1.0000
10 US	0.9953	0.9953	0.9953	0.9953	0.9953	0.9954	0.9958	0.9982	1.0000
20 US	0.9952	0.9952	0.9952	0.9952	0.9952	0.9953	0.9960	0.9993	1.0000
50 US	0.9948	0.9948	0.9948	0.9948	0.9948	0.9950	0.9967	0.9998	1.0000
100 US	0.9942	0.9942	0.9942	0.9942	0.9942	0.9947	0.9975	0.9998	1.0000
200 US	0.9929	0.9929	0.9929	0.9929	0.9930	0.9939	0.9983	0.9998	1.0000
500 US	0.9890	0.9890	0.9890	0.9891	0.9894	0.9922	0.9985	0.9998	1.0000
1 MS	0.9827	0.9827	0.9827	0.9828	0.9837	0.9902	0.9985	0.9998	1.0000
2 MS	0.9701	0.9701	0.9701	0.9704	0.9732	0.9883	0.9985	0.9998	1.0000
5 MS	0.9332	0.9332	0.9334	0.9349	0.9481	0.9873	0.9985	0.9998	1.0000
10 MS	0.8748	0.8748	0.8754	0.8809	0.9211	0.9872	0.9985	0.9998	1.0000
20 MS	0.7686	0.7686	0.7709	0.7897	0.8969	0.9872	0.9985	0.9998	1.0000
50 MS	0.5207	0.5217	0.5313	0.6130	0.8854	0.9872	0.9985	0.9998	1.0000
100 MS	0.2711	0.2739	0.2990	0.4903	0.8843	0.9874	0.9985	0.9998	1.0000
200 MS	0.0725	0.0781	0.1257	0.4366	0.8829	0.9920	0.9985	0.9998	1.0000
500 MS	0.0013	0.0085	0.0691	0.4227	0.8795	0.9848	0.9985	0.9998	1.0000
1 S	0.0000	0.0070	0.0658	0.4128	0.8757	0.9848	0.9985	0.9998	1.0000
2 S	0.0000	0.0067	0.0630	0.4020	0.8777	0.9848	0.9985	0.9998	1.0000
5 S	0.0000	0.0065	0.0611	0.3944	0.8663	0.9848	0.9985	0.9998	1.0000
10 S	0.0000	0.0065	0.0610	0.3980	0.8663	0.9848	0.9985	0.9998	1.0000

10<sup>12</sup> 10<sup>7</sup>

# THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE

## OF A MICA CAPACITOR

### THE CAPACITOR PARAMETERS USED ARE:

KP= 2.0000E-05 KD1= 0.0000E+00 KD2= 3.0000E-06  
 DELTA= 8.3000E-01 TD1= 1.0000E+1C TD2= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
 FOLLOWED BY A CONSTANT RATE OF 0.0000E+00 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
 TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9696	0.9696	0.896	0.9696	0.9696	0.9696	0.9696	0.9697	0.9700
1 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9697	0.9699	0.9725	0.9887
2 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9697	0.9702	0.9751	0.9958
5 US	0.9696	0.9696	0.9696	0.9696	0.9697	0.9698	0.9711	0.9816	0.9998
10 US	0.9696	0.9696	0.9696	0.9696	0.9697	0.9699	0.9725	0.9888	1.0000
20 US	0.9696	0.9696	0.9696	0.9696	0.9697	0.9702	0.9751	0.9959	1.0000
50 US	0.9696	0.9696	0.9696	0.9697	0.9698	0.9711	0.9816	0.9998	1.0000
100 US	0.9696	0.9696	0.9696	0.9697	0.9699	0.9725	0.9888	1.0000	1.0000
200 US	0.9696	0.9696	0.9696	0.9697	0.9697	0.9751	0.9959	1.0000	1.0000
500 US	0.9696	0.9696	0.9697	0.9698	0.9711	0.9816	0.9998	1.0000	1.0000
1 MS	0.9696	0.9696	0.9697	0.9699	0.9725	0.9888	1.0000	1.0000	1.0000
2 MS	0.9696	0.9696	0.9697	0.9702	0.9751	0.9959	1.0000	1.0000	1.0000
5 MS	0.9696	0.9696	0.9698	0.9711	0.9816	0.9998	1.0000	1.0000	1.0000
10 MS	0.9696	0.9696	0.9699	0.9725	0.9888	1.0000	1.0000	1.0000	1.0000
20 MS	0.9696	0.9696	0.9702	0.9751	0.9959	1.0000	1.0000	1.0000	1.0000
50 MS	0.9694	0.9696	0.9709	0.9814	0.9998	1.0000	1.0000	1.0000	1.0000
100 MS	0.9692	0.9695	0.9721	0.9886	1.0000	1.0000	1.0000	1.0000	1.0000
200 MS	0.9688	0.9694	0.9744	0.9955	1.0000	1.0000	1.0000	1.0000	1.0000
500 MS	0.9678	0.9693	0.9801	0.9995	1.0000	1.0000	1.0000	1.0000	1.0000
1 S	0.9665	0.9696	0.9870	0.9998	1.0000	1.0000	1.0000	1.0000	1.0000
2 S	0.9651	0.9711	0.9943	0.9999	1.0000	1.0000	1.0000	1.0000	1.0000
5 S	0.9640	0.9777	0.9995	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10 S	0.9638	0.9864	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

10<sup>3</sup>, 0

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MIÇA CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 2.0000E-05 KD1= 0.0000E+00 KD2= 3.0000E-06  
DELTA= 0.3000E-01 TD1= 1.0000E+10 TD2= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+03 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	INF	TAU (TIME CONSTANT)						10 US	100 US	1 MS	10 MS	100 MS	1 US
		10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US						
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9697	0.9696	0.9696	0.9697	0.9697	0.9700
1 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9699	0.9699	0.9697	0.9697	0.9725	0.9887
2 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9699	0.9699	0.9697	0.9697	0.9751	0.9958
5 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9699	0.9699	0.9698	0.9698	0.9816	0.9998
10 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9699	0.9699	0.9699	0.9699	0.9888	1.0000
20 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9699	0.9699	0.9702	0.9702	0.9959	1.0000
50 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9699	0.9699	0.9711	0.9711	0.9998	1.0000
100 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9699	0.9699	0.9725	0.9725	1.0000	1.0000
200 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9699	0.9699	0.9751	0.9751	1.0000	1.0000
500 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9699	0.9699	0.9816	0.9816	1.0000	1.0000
1 MS	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9699	0.9699	0.9888	0.9888	1.0000	1.0000
2 MS	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9699	0.9699	0.9959	0.9959	1.0000	1.0000
5 MS	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9699	0.9699	0.9998	0.9998	1.0000	1.0000
10 MS	0.9695	0.9695	0.9695	0.9695	0.9695	0.9695	0.9695	0.9698	0.9698	1.0000	1.0000	1.0000	1.0000
20 MS	0.9694	0.9694	0.9694	0.9694	0.9694	0.9694	0.9694	0.9698	0.9698	1.0000	1.0000	1.0000	1.0000
50 MS	0.9691	0.9691	0.9691	0.9691	0.9691	0.9691	0.9691	0.9697	0.9697	1.0000	1.0000	1.0000	1.0000
100 MS	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686	0.9699	0.9699	1.0000	1.0000	1.0000	1.0000
200 MS	0.9676	0.9676	0.9676	0.9676	0.9676	0.9676	0.9676	0.9699	0.9699	1.0000	1.0000	1.0000	1.0000
500 MS	0.9647	0.9647	0.9647	0.9647	0.9647	0.9647	0.9647	0.9699	0.9699	1.0000	1.0000	1.0000	1.0000
1 S	0.9602	0.9602	0.9602	0.9602	0.9602	0.9602	0.9602	0.9699	0.9699	1.0000	1.0000	1.0000	1.0000
2 S	0.9521	0.9521	0.9521	0.9521	0.9521	0.9521	0.9521	0.9699	0.9699	1.0000	1.0000	1.0000	1.0000
5 S	0.9304	0.9304	0.9304	0.9304	0.9304	0.9304	0.9304	0.9699	0.9699	1.0000	1.0000	1.0000	1.0000
10 S	0.8966	0.8966	0.8966	0.8966	0.8966	0.8966	0.8966	0.9699	0.9699	1.0000	1.0000	1.0000	1.0000

10<sup>3</sup>, 10<sup>3</sup>



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MIÇA CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
KP= 2.00000-05 KD1= 0.00000+00 KD2= 3.00000-06  
DELTA= 8.30000-01 TD1= 1.00000+10 TD2= 1.30000+00

THE RADIATION PULSE IS 1.00000+13 RAD/SEC FOR 2.50000-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.00000+04 RAD/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9697	0.9700
1 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9697	0.9699	0.9725	0.9887
2 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9697	0.9702	0.9751	0.9958
5 US	0.9696	0.9696	0.9696	0.9696	0.9697	0.9698	0.9711	0.9816	0.9998
10 US	0.9696	0.9696	0.9696	0.9696	0.9697	0.9699	0.9725	0.9888	1.0000
20 US	0.9696	0.9696	0.9696	0.9697	0.9698	0.9711	0.9816	0.9959	1.0000
50 US	0.9696	0.9696	0.9696	0.9697	0.9699	0.9725	0.9888	0.9998	1.0000
100 US	0.9696	0.9696	0.9696	0.9697	0.9702	0.9751	0.9959	1.0000	1.0000
200 US	0.9696	0.9696	0.9696	0.9698	0.9711	0.9816	0.9998	1.0000	1.0000
500 US	0.9696	0.9696	0.9696	0.9699	0.9725	0.9888	1.0000	1.0000	1.0000
1 MS	0.9696	0.9696	0.9696	0.9699	0.9725	0.9888	1.0000	1.0000	1.0000
2 MS	0.9696	0.9696	0.9696	0.9702	0.9751	0.9959	1.0000	1.0000	1.0000
5 MS	0.9694	0.9694	0.9696	0.9709	0.9814	0.9997	1.0000	1.0000	1.0000
10 MS	0.9692	0.9692	0.9695	0.9721	0.9885	1.0000	1.0000	1.0000	1.0000
20 MS	0.9687	0.9688	0.9694	0.9743	0.9955	1.0000	1.0000	1.0000	1.0000
50 MS	0.9674	0.9675	0.9689	0.9798	0.9993	1.0000	1.0000	1.0000	1.0000
100 MS	0.9651	0.9655	0.9682	0.9855	0.9995	1.0000	1.0000	1.0000	1.0000
200 MS	0.9606	0.9613	0.9670	0.9919	0.9995	1.0000	1.0000	1.0000	1.0000
500 MS	0.9471	0.9491	0.9637	0.9950	0.9995	1.0000	1.0000	1.0000	1.0000
1 S	0.9247	0.9296	0.9598	0.9950	0.9995	1.0000	1.0000	1.0000	1.0000
2 S	0.8806	0.8940	0.9557	0.9950	0.9995	1.0000	1.0000	1.0000	1.0000
5 S	0.7528	0.8123	0.9527	0.9950	0.9995	1.0000	1.0000	1.0000	1.0000
10 S	0.5912	0.7357	0.9524	0.9950	0.9995	1.0000	1.0000	1.0000	1.0000

## THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE

## OF A MICA CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 2.0000E-05 KD1= 0.0000E+00 KD2= 3.0000E-06  
 DELTA= 8.3000E-01 TD1= 1.0000E+10 TD2= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
 FOLLOWED BY A CONSTANT RATE OF 1.0000E+05 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
 TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						10 US	100 US	1 MS	10 US	1 US
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS					
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9697	0.9700
1 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9697	0.9725	0.9887
2 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9697	0.9751	0.9958
5 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9697	0.9697	0.9698	0.9816	0.9998
10 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9697	0.9697	0.9699	0.9888	1.0000
20 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9697	0.9697	0.9702	0.9959	1.0000
50 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9698	0.9698	0.9711	0.9998	1.0000
100 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9699	0.9699	0.9725	1.0000	1.0000
200 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9702	0.9702	0.9751	1.0000	1.0000
500 US	0.9695	0.9695	0.9695	0.9695	0.9695	0.9697	0.9710	0.9710	0.9815	1.0000	1.0000
1 MS	0.9694	0.9694	0.9694	0.9694	0.9694	0.9697	0.9723	0.9723	0.9887	1.0000	1.0000
2 MS	0.9691	0.9691	0.9691	0.9691	0.9691	0.9697	0.9746	0.9746	0.9956	1.0000	1.0000
5 MS	0.9683	0.9683	0.9683	0.9683	0.9683	0.9698	0.9805	0.9805	0.9995	1.0000	1.0000
10 MS	0.9669	0.9669	0.9672	0.9699	0.9699	0.9699	0.9870	0.9870	0.9997	1.0000	1.0000
20 MS	0.9641	0.9641	0.9647	0.9701	0.9701	0.9701	0.9934	0.9934	0.9997	1.0000	1.0000
50 MS	0.9558	0.9560	0.9576	0.9706	0.9706	0.9706	0.9966	0.9966	0.9997	1.0000	1.0000
100 MS	0.9420	0.9425	0.9462	0.9711	0.9711	0.9711	0.9966	0.9966	0.9997	1.0000	1.0000
200 MS	0.9149	0.9160	0.9253	0.9714	0.9714	0.9714	0.9966	0.9966	0.9997	1.0000	1.0000
500 MS	0.8364	0.8409	0.8751	0.9708	0.9708	0.9708	0.9966	0.9966	0.9997	1.0000	1.0000
1 S	0.7166	0.7306	0.8215	0.9697	0.9697	0.9697	0.9966	0.9966	0.9997	1.0000	1.0000
2 S	0.5197	0.5609	0.7735	0.9684	0.9684	0.9684	0.9966	0.9966	0.9997	1.0000	1.0000
5 S	0.1912	0.3204	0.7492	0.9675	0.9675	0.9675	0.9966	0.9966	0.9997	1.0000	1.0000
10 S	0.0354	0.2389	0.7476	0.9677	0.9677	0.9677	0.9966	0.9966	0.9997	1.0000	1.0000

**THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MICA CAPACITOR**

**THE CAPACITOR PARAMETERS USED ARE:**

KP= 2.0000E-05 K01= 0.0000E+00 K02= 3.0000E-06  
DELTA= 8.3000E-01 T01= 1.0000E+10 T02= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+06 RADS/SEC

**TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.**

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						1 MS	100 US	10 US	1 US
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS				
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9697	0.9700
1 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9697	0.9699	0.9725	0.9725	0.9887
2 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9697	0.9702	0.9751	0.9751	0.9958
5 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9698	0.9711	0.9816	0.9816	0.9998
10 US	0.9696	0.9696	0.9696	0.9696	0.9697	0.9699	0.9725	0.9888	0.9888	1.0000
20 US	0.9696	0.9696	0.9696	0.9696	0.9697	0.9702	0.9751	0.9959	0.9959	1.0000
50 US	0.9695	0.9696	0.9696	0.9696	0.9697	0.9710	0.9815	0.9998	0.9998	1.0000
100 US	0.9695	0.9695	0.9695	0.9695	0.9698	0.9724	0.9887	1.0000	1.0000	1.0000
200 US	0.9693	0.9693	0.9693	0.9693	0.9699	0.9748	0.9957	1.0000	1.0000	1.0000
500 US	0.9687	0.9687	0.9687	0.9689	0.9702	0.9809	0.9996	1.0000	1.0000	1.0000
1 MS	0.9678	0.9678	0.9678	0.9681	0.9708	0.9876	0.9998	1.0000	1.0000	1.0000
2 MS	0.9659	0.9659	0.9660	0.9666	0.9718	0.9943	0.9998	1.0000	1.0000	1.0000
5 MS	0.9604	0.9604	0.9606	0.9621	0.9743	0.9977	0.9998	1.0000	1.0000	1.0000
10 MS	0.9512	0.9513	0.9516	0.9550	0.9770	0.9977	0.9998	1.0000	1.0000	1.0000
20 MS	0.9332	0.9333	0.9341	0.9420	0.9777	0.9977	0.9998	1.0000	1.0000	1.0000
50 MS	0.8802	0.8812	0.8844	0.9109	0.9777	0.9977	0.9998	1.0000	1.0000	1.0000
100 MS	0.7996	0.8007	0.8102	0.8780	0.9777	0.9977	0.9998	1.0000	1.0000	1.0000
200 MS	0.6576	0.6610	0.6895	0.8489	0.9777	0.9977	0.9998	1.0000	1.0000	1.0000
500 MS	0.3608	0.3742	0.4777	0.8326	0.9777	0.9977	0.9998	1.0000	1.0000	1.0000
1 S	0.1279	0.1565	0.3572	0.8264	0.9777	0.9977	0.9998	1.0000	1.0000	1.0000
2 S	0.0147	0.0556	0.3159	0.8198	0.9777	0.9977	0.9998	1.0000	1.0000	1.0000
5 S	0.0000	0.0422	0.3056	0.8148	0.9777	0.9977	0.9998	1.0000	1.0000	1.0000
10 S	0.0000	0.0420	0.3047	0.8148	0.9777	0.9977	0.9998	1.0000	1.0000	1.0000

10<sup>13</sup>, 10<sup>6</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE

OF A MICA CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 2.0000E-05 KD1= 0.0000E+00 KD2= 3.0000E-06  
 DELTA= 8.3000E-01 TD1= 1.0000E+10 TD2= 1.3000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
 FOLLOWED BY A CONSTANT RATE CF 1.0000E+07 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
 TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	1 US
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9700
1 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9697	0.9887
2 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9697	0.9958
5 US	0.9696	0.9696	0.9696	0.9696	0.9696	0.9697	0.9998
10 US	0.9695	0.9695	0.9695	0.9695	0.9695	0.9698	1.0000
20 US	0.9694	0.9694	0.9694	0.9694	0.9695	0.9700	1.0000
50 US	0.9690	0.9690	0.9690	0.9690	0.9692	0.9705	1.0000
100 US	0.9684	0.9684	0.9684	0.9684	0.9687	0.9713	1.0000
200 US	0.9671	0.9671	0.9671	0.9672	0.9678	0.9729	1.0000
500 US	0.9634	0.9634	0.9634	0.9636	0.9650	0.9766	1.0000
1 MS	0.9572	0.9572	0.9572	0.9576	0.9607	0.9809	1.0000
2 MS	0.9449	0.9449	0.9450	0.9457	0.9527	0.9848	1.0000
5 MS	0.9090	0.9090	0.9093	0.9119	0.9334	0.9848	1.0000
10 MS	0.8521	0.8521	0.8529	0.8603	0.9127	0.9848	1.0000
20 MS	0.7486	0.7489	0.7512	0.7733	0.8942	0.9848	1.0000
50 MS	0.5071	0.5082	0.5183	0.6048	0.8853	0.9848	1.0000
100 MS	0.2639	0.2669	0.2925	0.4876	0.8843	0.9848	1.0000
200 MS	0.0706	0.0762	0.1241	0.4362	0.8829	0.9848	1.0000
500 MS	0.0012	0.0084	0.0691	0.4226	0.8795	0.9848	1.0000
1 S	0.0000	0.0070	0.0658	0.4127	0.8757	0.9848	1.0000
2 S	0.0000	0.0067	0.0630	0.4020	0.8777	0.9848	1.0000
5 S	0.0000	0.0065	0.0611	0.3944	0.8663	0.9848	1.0000
10 S	0.0000	0.0065	0.0610	0.3940	0.8663	0.9848	1.0000

10<sup>13</sup>, 10<sup>7</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 6.0000E-05 KD1= 2.0000E+00 KD2= 9.0000E-06  
DELTA= 8.6000E-01 TC1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 0.0000E+00 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
1 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
2 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
5 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
10 US	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992
20 US	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990
50 US	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985
100 US	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976
200 US	0.9963	0.9963	0.9963	0.9963	0.9963	0.9963	0.9963
500 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
1 MS	0.9921	0.9921	0.9921	0.9921	0.9921	0.9921	0.9921
2 MS	0.9915	0.9915	0.9915	0.9915	0.9915	0.9915	0.9915
5 MS	0.9915	0.9915	0.9915	0.9915	0.9915	0.9915	0.9915
10 MS	0.9915	0.9915	0.9915	0.9915	0.9915	0.9915	0.9915
20 MS	0.9915	0.9915	0.9915	0.9915	0.9915	0.9915	0.9915
50 MS	0.9915	0.9915	0.9915	0.9915	0.9915	0.9915	0.9915
100 MS	0.9915	0.9915	0.9915	0.9915	0.9915	0.9915	0.9915
200 MS	0.9914	0.9914	0.9914	0.9914	0.9914	0.9914	0.9914
500 MS	0.9914	0.9914	0.9914	0.9914	0.9914	0.9914	0.9914
1 S	0.9914	0.9914	0.9914	0.9914	0.9914	0.9914	0.9914
2 S	0.9914	0.9914	0.9914	0.9914	0.9914	0.9914	0.9914
5 S	0.9914	0.9914	0.9914	0.9914	0.9914	0.9914	0.9914
10 S	0.9914	0.9914	0.9914	0.9914	0.9914	0.9914	0.9914

# THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE

## OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 6.0000E-05 KD1= 2.0000E+00 KD2= 9.0000E-06  
 DELTA= 8.6000E-01 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-04 SEC  
 FOLLOWED BY A CONSTANT RATE OF 1.0000E+03 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
 TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	INF	TAU (TIME CONSTANT)						10 US	1 MS	100 US	1 US
		10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US				
25 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
2 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
5 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
10 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
20 US	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992
50 US	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990
100 US	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985
200 US	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976
500 US	0.9963	0.9963	0.9963	0.9963	0.9963	0.9963	0.9963	0.9963	0.9963	0.9963	0.9963
1 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
2 MS	0.9919	0.9919	0.9919	0.9919	0.9919	0.9919	0.9919	0.9919	0.9919	0.9919	0.9919
5 MS	0.9910	0.9910	0.9910	0.9910	0.9910	0.9910	0.9910	0.9910	0.9910	0.9910	0.9910
10 MS	0.9900	0.9900	0.9900	0.9900	0.9900	0.9900	0.9900	0.9900	0.9900	0.9900	0.9900
20 MS	0.9884	0.9884	0.9884	0.9884	0.9884	0.9884	0.9884	0.9884	0.9884	0.9884	0.9884
50 MS	0.9851	0.9851	0.9851	0.9851	0.9851	0.9851	0.9851	0.9851	0.9851	0.9851	0.9851
100 MS	0.9755	0.9755	0.9755	0.9755	0.9755	0.9755	0.9755	0.9755	0.9755	0.9755	0.9755
200 MS	0.9597	0.9597	0.9597	0.9597	0.9597	0.9597	0.9597	0.9597	0.9597	0.9597	0.9597
500 MS	0.9288	0.9288	0.9288	0.9288	0.9288	0.9288	0.9288	0.9288	0.9288	0.9288	0.9288
1 S	0.8417	0.8417	0.8417	0.8417	0.8417	0.8417	0.8417	0.8417	0.8417	0.8417	0.8417
2 S	0.7141	0.7141	0.7141	0.7141	0.7141	0.7141	0.7141	0.7141	0.7141	0.7141	0.7141
5 S	0.5136	0.5136	0.5136	0.5136	0.5136	0.5136	0.5136	0.5136	0.5136	0.5136	0.5136
10 S	0.1907	0.1907	0.1907	0.1907	0.1907	0.1907	0.1907	0.1907	0.1907	0.1907	0.1907
	0.0366	0.0366	0.0366	0.0366	0.0366	0.0366	0.0366	0.0366	0.0366	0.0366	0.0366

10<sup>10</sup>, 10<sup>3</sup>



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 6.0000E-05 KD1= 2.0000E+00 KD2= 9.0000E-06  
DELTA= 8.6000E-01 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+04 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
G	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
1 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9997
2 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9995	0.9999
5 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9996	1.0000
10 US	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9993	0.9997	1.0000
20 US	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990	0.9992	0.9998	1.0000
50 US	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	0.9989	0.9998	1.0000
100 US	0.9976	0.9976	0.9976	0.9976	0.9976	0.9976	0.9987	0.9998	1.0000
200 US	0.9962	0.9962	0.9962	0.9962	0.9962	0.9966	0.9986	0.9999	1.0000
500 US	0.9932	0.9932	0.9932	0.9932	0.9934	0.9949	0.9991	0.9999	1.0000
1 MS	0.9906	0.9906	0.9906	0.9906	0.9912	0.9949	0.9996	1.0000	1.0000
2 MS	0.9877	0.9877	0.9877	0.9879	0.9893	0.9964	0.9997	1.0000	1.0000
5 MS	0.9807	0.9807	0.9807	0.9813	0.9860	0.9976	0.9998	1.0000	1.0000
10 MS	0.9691	0.9691	0.9693	0.9709	0.9823	0.9976	0.9998	1.0000	1.0000
20 MS	0.9464	0.9465	0.9470	0.9520	0.9782	0.9976	0.9998	1.0000	1.0000
50 MS	0.8815	0.8818	0.8845	0.9075	0.9769	0.9976	0.9998	1.0000	1.0000
100 MS	0.7830	0.7840	0.7933	0.8418	0.9762	0.9976	0.9998	1.0000	1.0000
200 MS	0.6176	0.6212	0.6511	0.8232	0.9762	0.9976	0.9998	1.0000	1.0000
500 MS	0.3022	0.3167	0.4251	0.8023	0.9762	0.9976	0.9998	1.0000	1.0000
1 S	0.0920	0.1202	0.3195	0.8075	0.9771	0.9976	0.9998	1.0000	1.0000
2 S	0.0085	0.0468	0.2559	0.8071	0.9820	0.9976	0.9998	1.0000	1.0000
5 S	0.0000	0.0401	0.2547	0.8069	0.9766	0.9976	0.9998	1.0000	1.0000
10 S	0.0000	0.0401	0.2947	0.8075	0.9766	0.9976	0.9998	1.0000	1.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 6.0000E-05 KD1= 2.0000E+00 KD2= 9.0000E-06  
DELTA= 8.6000E-01 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+05 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
1 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
2 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9995
5 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9996
10 US	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9996
20 US	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990	0.9997
50 US	0.9984	0.9984	0.9984	0.9984	0.9984	0.9984	0.9998
100 US	0.9973	0.9973	0.9973	0.9973	0.9974	0.9975	0.9998
200 US	0.9954	0.9954	0.9954	0.9954	0.9954	0.9959	0.9998
500 US	0.9898	0.9898	0.9898	0.9898	0.9900	0.9921	0.9998
1 MS	0.9810	0.9810	0.9810	0.9811	0.9819	0.9883	0.9998
2 MS	0.9642	0.9642	0.9642	0.9645	0.9676	0.9849	0.9998
5 MS	0.9158	0.9158	0.9160	0.9179	0.9338	0.9832	0.9998
10 MS	0.8405	0.8406	0.8413	0.8481	0.8982	0.9831	0.9998
20 MS	0.7079	0.7082	0.7107	0.7339	0.8674	0.9831	0.9998
50 MS	0.4230	0.4242	0.4352	0.5300	0.8539	0.9831	0.9998
100 MS	0.1792	0.1822	0.2083	0.4097	0.8534	0.9835	0.9998
200 MS	0.0321	0.0371	0.0799	0.3706	0.8533	0.9883	0.9998
500 MS	0.0002	0.0059	0.0550	0.3673	0.8531	0.9830	0.9998
1 S	0.0000	0.0038	0.0547	0.3667	0.8533	0.9830	0.9998
2 S	0.0000	0.0057	0.0546	0.3661	0.8601	0.9830	0.9998
5 S	0.0000	0.0057	0.0545	0.3662	0.8522	0.9830	0.9998
10 S	0.0000	0.0058	0.0547	0.3716	0.8522	0.9830	0.9998

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 6.0000E-05 KD1= 2.0000E+00 KD2= 9.0000E-06  
DELTA= 8.6000E-01 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+06 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)							
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
1 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
2 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
5 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
10 US	0.9991	0.9991	0.9991	0.9991	0.9991	0.9991	0.9991	0.9991
20 US	0.9988	0.9988	0.9988	0.9988	0.9988	0.9988	0.9988	0.9988
50 US	0.9977	0.9977	0.9977	0.9977	0.9977	0.9977	0.9977	0.9977
100 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955
200 US	0.9897	0.9897	0.9897	0.9897	0.9897	0.9897	0.9897	0.9897
500 US	0.9652	0.9652	0.9652	0.9652	0.9652	0.9652	0.9652	0.9652
1 MS	0.9142	0.9142	0.9142	0.9142	0.9142	0.9142	0.9142	0.9142
2 MS	0.8096	0.8096	0.8096	0.8096	0.8096	0.8096	0.8096	0.8096
5 MS	0.5577	0.5577	0.5577	0.5577	0.5577	0.5577	0.5577	0.5577
10 MS	0.2996	0.2996	0.2996	0.2996	0.2996	0.2996	0.2996	0.2996
20 MS	0.0864	0.0870	0.0920	0.1401	0.4525	0.8894	0.9987	0.9999
50 MS	0.0021	0.0029	0.0099	0.0756	0.4457	0.8894	0.9987	0.9999
100 MS	0.0000	0.0008	0.0080	0.0744	0.4456	0.8898	0.9987	0.9999
200 MS	0.0000	0.0008	0.0080	0.0743	0.4454	0.8961	0.9987	0.9999
500 MS	0.0000	0.0008	0.0079	0.0742	0.4450	0.8884	0.9987	0.9999
1 S	0.0000	0.0008	0.0079	0.0741	0.4476	0.8834	0.9987	0.9999
2 S	0.0000	0.0008	0.0080	0.0750	0.4822	0.8884	0.9987	0.9999
5 S	0.0000	0.0010	0.0098	0.0948	0.8452	0.8824	0.9987	0.9999
10 S	0.0000	0.0017	0.0168	0.1674	0.4432	0.8884	0.9987	0.9999

**THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MYLAR CAPACITOR**

**THE CAPACITOR PARAMETERS USED ARE:**

KP= 6.0000E-05      K01= 2.0000E+00      KD2= 9.0000E-C6  
DELTA= 8.6000E-01      T01= 4.0000E-C4      TD2= 1.0000E+2C

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+07 RADS/SEC

**TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.**

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)					1 MS	10C US	10 US	1 US
	INF	10 SEC	1 SEC	10C MS	1C MS				
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
1 US	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993	0.9993
2 US	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992	0.9992
5 US	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990
10 US	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985
20 US	0.9974	0.9974	0.9974	0.9974	0.9974	0.9974	0.9974	0.9974	0.9974
50 US	0.9928	0.9928	0.9928	0.9928	0.9928	0.9928	0.9928	0.9928	0.9928
100 US	0.9819	0.9819	0.9819	0.9819	0.9819	0.9819	0.9819	0.9819	0.9819
200 US	0.9493	0.9493	0.9493	0.9493	0.9493	0.9493	0.9493	0.9493	0.9493
500 US	0.8046	0.8046	0.8046	0.8046	0.8046	0.8046	0.8046	0.8046	0.8046
1 MS	0.5483	0.5483	0.5483	0.5483	0.5483	0.5483	0.5483	0.5483	0.5483
2 MS	0.2284	0.2284	0.2284	0.2284	0.2284	0.2284	0.2284	0.2284	0.2284
5 MS	0.0154	0.0155	0.0164	0.0255	0.1087	0.5263	0.9174	0.9910	0.9991
10 MS	0.0002	0.0003	0.0013	0.0111	0.1000	0.5261	0.9178	0.9910	0.9991
20 MS	0.0000	0.0001	0.0011	0.0110	0.0999	0.5261	0.9237	0.9910	0.9991
50 MS	0.0000	0.0001	0.0011	0.0110	0.0999	0.5262	0.9166	0.9910	0.9991
100 MS	0.0000	0.0001	0.0011	0.0110	0.0999	0.5261	0.9166	0.9910	0.9991
200 MS	0.0000	0.0001	0.0011	0.0110	0.1003	0.5320	0.9166	0.9910	0.9991
500 MS	0.0000	0.0001	0.0012	0.0119	0.1117	0.8620	0.9166	0.9910	0.9991
1 S	0.0000	0.0002	0.0017	0.0174	0.1710	0.5236	0.9166	0.9910	0.9991
2 S	0.0000	0.0003	0.0033	0.0333	0.3334	0.5236	0.9166	0.9910	0.9991
5 S	0.0000	0.0008	0.0083	0.0833	0.8333	0.5236	0.9166	0.9910	0.9991
10 S	0.0000	0.0017	0.0167	0.1667	0.0990	0.5236	0.9166	0.9910	0.9991

$10^{10}, 10^7$

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 6.0000E-05 KD1= 2.0000E+00 KD2= 9.0000E-06  
DELTA= 8.6000E-01 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+11 RAD/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 0.0000E+00 RAD/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957
1 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955
2 US	0.9954	0.9954	0.9954	0.9954	0.9954	0.9954	0.9954
5 US	0.9950	0.9950	0.9950	0.9950	0.9950	0.9950	0.9950
10 US	0.9943	0.9943	0.9943	0.9943	0.9943	0.9943	0.9943
20 US	0.9929	0.9929	0.9929	0.9929	0.9929	0.9929	0.9929
50 US	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890
100 US	0.9831	0.9831	0.9831	0.9831	0.9831	0.9831	0.9831
200 US	0.9733	0.9733	0.9733	0.9733	0.9733	0.9733	0.9733
500 US	0.9555	0.9555	0.9555	0.9555	0.9555	0.9555	0.9555
1 MS	0.9443	0.9443	0.9443	0.9443	0.9443	0.9443	0.9443
2 MS	0.9402	0.9402	0.9402	0.9402	0.9402	0.9402	0.9402
5 MS	0.9399	0.9399	0.9399	0.9399	0.9399	0.9399	0.9399
10 MS	0.9399	0.9399	0.9399	0.9399	0.9399	0.9399	0.9399
20 MS	0.9399	0.9399	0.9399	0.9399	0.9399	0.9399	0.9399
50 MS	0.9398	0.9398	0.9398	0.9398	0.9398	0.9398	0.9398
100 MS	0.9398	0.9398	0.9398	0.9398	0.9398	0.9398	0.9398
200 MS	0.9396	0.9396	0.9396	0.9396	0.9396	0.9396	0.9396
500 MS	0.9393	0.9393	0.9393	0.9393	0.9393	0.9393	0.9393
1 S	0.9393	0.9393	0.9393	0.9393	0.9393	0.9393	0.9393
2 S	0.9393	0.9393	0.9393	0.9393	0.9393	0.9393	0.9393
5 S	0.9393	0.9393	0.9393	0.9393	0.9393	0.9393	0.9393
10 S	0.9393	0.9393	0.9393	0.9393	0.9393	0.9393	0.9393

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 6.0000E-05 K01= 2.0000E+00 K02= 9.0000E-06  
DELTA= 8.6000E-01 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+11 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+03 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957
1 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955
2 US	0.9954	0.9954	0.9954	0.9954	0.9954	0.9954	0.9954	0.9954	0.9954
5 US	0.9950	0.9950	0.9950	0.9950	0.9950	0.9950	0.9950	0.9950	0.9950
10 US	0.9943	0.9943	0.9943	0.9943	0.9943	0.9943	0.9943	0.9943	0.9943
20 US	0.9929	0.9929	0.9929	0.9929	0.9929	0.9929	0.9929	0.9929	0.9929
50 US	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890
100 US	0.9831	0.9831	0.9831	0.9831	0.9831	0.9831	0.9831	0.9831	0.9831
200 US	0.9733	0.9733	0.9733	0.9733	0.9733	0.9733	0.9733	0.9733	0.9733
500 US	0.9555	0.9555	0.9555	0.9555	0.9555	0.9555	0.9555	0.9555	0.9555
1 MS	0.9441	0.9441	0.9441	0.9441	0.9441	0.9441	0.9441	0.9441	0.9441
2 MS	0.9397	0.9397	0.9397	0.9397	0.9397	0.9397	0.9397	0.9397	0.9397
5 MS	0.9385	0.9385	0.9385	0.9385	0.9385	0.9385	0.9385	0.9385	0.9385
10 MS	0.9369	0.9370	0.9375	0.9426	0.9751	0.9997	1.0000	1.0000	1.0000
20 MS	0.9339	0.9340	0.9351	0.9451	0.9888	0.9997	1.0000	1.0000	1.0000
50 MS	0.9247	0.9250	0.9280	0.9513	0.9963	0.9997	1.0000	1.0000	1.0000
100 MS	0.9097	0.9104	0.9167	0.9581	0.9967	0.9997	1.0000	1.0000	1.0000
200 MS	0.8803	0.8821	0.8964	0.9647	0.9967	0.9997	1.0000	1.0000	1.0000
500 MS	0.7977	0.8038	0.8492	0.9680	0.9967	0.9997	1.0000	1.0000	1.0000
1 S	0.6767	0.6936	0.8022	0.9680	0.9967	0.9997	1.0000	1.0000	1.0000
2 S	0.4866	0.5324	0.7453	0.9680	0.9967	0.9997	1.0000	1.0000	1.0000
5 S	0.1807	0.3150	0.7519	0.9680	0.9967	0.9997	1.0000	1.0000	1.0000
10 S	0.0346	0.2420	0.7517	0.9680	0.9967	0.9997	1.0000	1.0000	1.0000



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
KP= 6.0000E-05 KD1= 2.0000E+00 KD2= 9.0000E-06  
DELTA= 8.6000E-01 TD1= 3.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+11 RAD/S/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+04 RAD/S/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957
1 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9956	0.9960	0.9983
2 US	0.9954	0.9954	0.9954	0.9954	0.9954	0.9954	0.9955	0.9962	0.9993
5 US	0.9950	0.9950	0.9950	0.9950	0.9950	0.9950	0.9952	0.9968	0.9998
10 US	0.9943	0.9943	0.9943	0.9943	0.9943	0.9943	0.9948	0.9975	0.9999
20 US	0.9929	0.9929	0.9929	0.9929	0.9929	0.9930	0.9939	0.9982	0.9999
50 US	0.9889	0.9889	0.9889	0.9889	0.9890	0.9893	0.9921	0.9987	0.9999
100 US	0.9830	0.9830	0.9830	0.9830	0.9831	0.9841	0.9906	0.9988	1.0000
200 US	0.9732	0.9732	0.9732	0.9733	0.9735	0.9763	0.9904	0.9991	1.0000
500 US	0.9550	0.9550	0.9550	0.9551	0.9564	0.9669	0.9945	0.9996	1.0000
1 MS	0.9429	0.9429	0.9429	0.9433	0.9467	0.9706	0.9982	1.0000	1.0000
2 MS	0.9366	0.9366	0.9367	0.9376	0.9459	0.9856	0.9996	1.0000	1.0000
5 MS	0.9296	0.9297	0.9299	0.9326	0.9538	0.9970	0.9998	1.0000	1.0000
10 MS	0.9187	0.9187	0.9193	0.9251	0.9631	0.9976	0.9998	1.0000	1.0000
20 MS	0.8972	0.8973	0.8987	0.9116	0.9719	0.9976	0.9998	1.0000	1.0000
50 MS	0.8356	0.8361	0.8408	0.8796	0.9766	0.9976	0.9998	1.0000	1.0000
100 MS	0.7422	0.7436	0.7564	0.8467	0.9766	0.9976	0.9998	1.0000	1.0000
200 MS	0.5854	0.5896	0.6248	0.8194	0.9766	0.9976	0.9998	1.0000	1.0000
500 MS	0.2870	0.3017	0.4155	0.8082	0.9766	0.9976	0.9998	1.0000	1.0000
1 S	0.0872	0.1158	0.3177	0.8075	0.9766	0.9976	0.9998	1.0000	1.0000
2 S	0.0080	0.0465	0.2958	0.8071	0.9766	0.9976	0.9998	1.0000	1.0000
5 S	0.0000	0.0401	0.2947	0.8069	0.9766	0.9976	0.9998	1.0000	1.0000
10 S	0.0000	0.0401	0.2947	0.8075	0.9766	0.9976	0.9998	1.0000	1.0000

10", 10"

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 4.0000E-05 KD1= 2.0000E+00 KD2= 9.0000E-06  
DELTA= 8.6000E-01 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+11 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+05 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 MS	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	
1 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9956	0.9960	0.9983	
2 US	0.9954	0.9954	0.9954	0.9954	0.9954	0.9954	0.9955	0.9962	0.9993	
5 US	0.9950	0.9950	0.9950	0.9950	0.9950	0.9950	0.9952	0.9968	0.9998	
10 US	0.9943	0.9943	0.9943	0.9943	0.9943	0.9943	0.9947	0.9975	0.9999	
20 US	0.9929	0.9929	0.9929	0.9929	0.9929	0.9930	0.9939	0.9982	0.9999	
50 US	0.9889	0.9889	0.9889	0.9889	0.9889	0.9892	0.9920	0.9987	0.9999	
100 US	0.9828	0.9828	0.9828	0.9828	0.9829	0.9838	0.9904	0.9988	1.0000	
200 US	0.9724	0.9724	0.9724	0.9725	0.9728	0.9756	0.9900	0.9990	1.0000	
500 US	0.9517	0.9517	0.9517	0.9518	0.9532	0.9641	0.9935	0.9995	1.0000	
1 MS	0.9337	0.9337	0.9338	0.9342	0.9379	0.9642	0.9969	0.9998	1.0000	
2 MS	0.9143	0.9143	0.9144	0.9155	0.9253	0.9744	0.9982	0.9998	1.0000	
5 MS	0.8681	0.8682	0.8686	0.8724	0.9038	0.9827	0.9983	0.9998	1.0000	
10 MS	0.7967	0.7969	0.7979	0.8083	0.8815	0.9830	0.9983	0.9998	1.0000	
20 MS	0.6711	0.6714	0.6746	0.7036	0.8222	0.9830	0.9983	0.9998	1.0000	
50 MS	0.4010	0.4023	0.4143	0.5166	0.8337	0.9830	0.9983	0.9998	1.0000	
100 MS	0.1699	0.1730	0.1998	0.4062	0.8534	0.9830	0.9983	0.9998	1.0000	
200 MS	0.0305	0.0355	0.0785	0.3703	0.8533	0.9830	0.9983	0.9998	1.0000	
500 MS	0.0002	0.0059	0.0550	0.3673	0.8531	0.9830	0.9983	0.9998	1.0000	
1 S	0.0000	0.0058	0.0547	0.3667	0.8533	0.9830	0.9983	0.9998	1.0000	
2 S	0.0000	0.0057	0.0546	0.3661	0.8601	0.9830	0.9983	0.9998	1.0000	
5 S	0.0000	0.0057	0.0545	0.3662	0.8522	0.9830	0.9983	0.9998	1.0000	
10 S	0.0000	0.0058	0.0547	0.3716	0.8522	0.9830	0.9983	0.9998	1.0000	

10", 10"

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
KP= 6.0000E-05 KD1= 2.0000E+00 XD2= 9.0000E-06  
DELTA= 8.6000E-01 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+11 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+06 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	1C MS	1 MS	100 US	10 US	1 US	
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 MS	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	
1 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9956	0.9959	0.9983	
2 US	0.9954	0.9954	0.9954	0.9954	0.9954	0.9954	0.9955	0.9962	0.9993	
5 US	0.9949	0.9949	0.9949	0.9949	0.9949	0.9949	0.9952	0.9968	0.9998	
10 US	0.9942	0.9942	0.9942	0.9942	0.9942	0.9942	0.9947	0.9975	0.9998	
20 US	0.9927	0.9927	0.9927	0.9927	0.9927	0.9928	0.9937	0.9981	0.9998	
50 US	0.9882	0.9882	0.9882	0.9882	0.9882	0.9886	0.9915	0.9985	0.9999	
100 US	0.9809	0.9809	0.9809	0.9809	0.9810	0.9820	0.9891	0.9985	0.9999	
200 US	0.9669	0.9669	0.9669	0.9669	0.9673	0.9704	0.9870	0.9986	0.9999	
500 US	0.9281	0.9281	0.9281	0.9283	0.9300	0.9443	0.9867	0.9987	0.9999	
1 MS	0.8701	0.8701	0.8702	0.8708	0.8766	0.9191	0.9874	0.9987	0.9999	
2 MS	0.7677	0.7679	0.7680	0.7701	0.7894	0.8987	0.9876	0.9987	0.9999	
5 MS	0.5287	0.5288	0.5298	0.5393	0.6211	0.8897	0.9876	0.9987	0.9999	
10 MS	0.2840	0.2843	0.2868	0.3119	0.5029	0.8894	0.9876	0.9987	0.9999	
20 MS	0.0819	0.0825	0.0876	0.1364	0.4518	0.8894	0.9876	0.9987	0.9999	
50 MS	0.0020	0.0029	0.0098	0.0755	0.4457	0.8894	0.9876	0.9987	0.9999	
100 MS	0.0000	0.0000	0.0000	0.0744	0.4454	0.8898	0.9876	0.9987	0.9999	
200 MS	0.0000	0.0000	0.0000	0.0743	0.4454	0.8961	0.9876	0.9987	0.9999	
500 MS	0.0000	0.0000	0.0000	0.0742	0.4450	0.8884	0.9876	0.9987	0.9999	
1 S	0.0000	0.0000	0.0000	0.0741	0.4476	0.8884	0.9876	0.9987	0.9999	
2 S	0.0000	0.0000	0.0000	0.0750	0.4822	0.8884	0.9876	0.9987	0.9999	
5 S	0.0000	0.0010	0.0038	0.0548	0.8452	0.8884	0.9876	0.9987	0.9999	
10 S	0.0000	0.0017	0.0168	0.1674	0.4432	0.8884	0.9876	0.9987	0.9999	

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KF= 6.0000E-05 K01= 2.0000E+00 K02= 9.0000E-06  
DELTA= 8.6000E-01 T01= 4.0000E-04 T02= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+11 RAD/S/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+07 RAD/S/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	INF	TAU (TIME CONSTANT)					10 US	100 US	1 MS	10 MS	1 US	10 US	1 US
		10 SEC	1 SEC	100 MS	10 MS	1 MS							
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957
1 US	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9959	0.9982
2 US	0.9953	0.9953	0.9953	0.9953	0.9953	0.9953	0.9953	0.9954	0.9953	0.9953	0.9954	0.9960	0.9991
5 US	0.9946	0.9946	0.9946	0.9946	0.9946	0.9946	0.9946	0.9949	0.9947	0.9947	0.9949	0.9964	0.9991
10 US	0.9935	0.9935	0.9935	0.9935	0.9935	0.9935	0.9935	0.9940	0.9936	0.9936	0.9940	0.9969	0.9991
20 US	0.9912	0.9912	0.9912	0.9912	0.9912	0.9912	0.9912	0.9924	0.9914	0.9914	0.9924	0.9973	0.9991
50 US	0.9834	0.9834	0.9834	0.9834	0.9834	0.9834	0.9834	0.9874	0.9839	0.9839	0.9874	0.9972	0.9991
100 US	0.9675	0.9675	0.9675	0.9675	0.9675	0.9675	0.9675	0.9796	0.9691	0.9691	0.9796	0.9965	0.9991
200 US	0.9275	0.9275	0.9275	0.9275	0.9275	0.9275	0.9275	0.9659	0.9337	0.9337	0.9659	0.9953	0.9991
500 US	0.7736	0.7736	0.7737	0.7741	0.7782	0.7782	0.7782	0.9398	0.8137	0.8137	0.9398	0.9931	0.9991
1 MS	0.5219	0.5220	0.5221	0.5237	0.5395	0.5395	0.5395	0.9237	0.6617	0.6617	0.9237	0.9920	0.9991
2 MS	0.2166	0.2165	0.2171	0.2216	0.2661	0.2661	0.2661	0.9179	0.5502	0.5502	0.9179	0.9962	0.9991
5 MS	0.0146	0.0147	0.0156	0.0247	0.1082	0.1082	0.1082	0.9174	0.5262	0.5262	0.9174	0.9910	0.9991
10 MS	0.0002	0.0003	0.0013	0.0111	0.1000	0.1000	0.1000	0.9178	0.5261	0.5261	0.9178	0.9910	0.9991
20 MS	0.0000	0.0001	0.0011	0.0110	0.0999	0.0999	0.0999	0.9237	0.5261	0.5261	0.9237	0.9910	0.9991
50 MS	0.0000	0.0001	0.0011	0.0110	0.0999	0.0999	0.0999	0.9166	0.5262	0.5262	0.9166	0.9910	0.9991
100 MS	0.0000	0.0001	0.0011	0.0110	0.0999	0.0999	0.0999	0.9166	0.5281	0.5281	0.9166	0.9910	0.9991
200 MS	0.0000	0.0001	0.0011	0.0110	0.1003	0.1003	0.1003	0.9166	0.5520	0.5520	0.9166	0.9910	0.9991
500 MS	0.0000	0.0001	0.0012	0.0119	0.1117	0.1117	0.1117	0.9166	0.8620	0.8620	0.9166	0.9910	0.9991
1 S	0.0000	0.0002	0.0017	0.0174	0.1710	0.1710	0.1710	0.9166	0.5236	0.5236	0.9166	0.9910	0.9991
2 S	0.0000	0.0003	0.0033	0.0333	0.3334	0.3334	0.3334	0.9166	0.5236	0.5236	0.9166	0.9910	0.9991
5 S	0.0000	0.0008	0.0083	0.0833	0.8333	0.8333	0.8333	0.9166	0.5236	0.5236	0.9166	0.9910	0.9991
10 S	0.0000	0.0017	0.0167	0.1667	0.0990	0.0990	0.0990	0.9166	0.5236	0.5236	0.9166	0.9910	0.9991

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THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 6.0000E-03 KD1= 2.0000E+00 KD2= 9.0000E-06  
DELTA= 8.6000E-01 T01= 4.0000E-04 T02= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 0.0000E+00 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9691	0.9691	0.9691	0.9691	0.9691	0.9691	0.9691	0.9692	0.9695
1 US	0.9681	0.9681	0.9681	0.9681	0.9682	0.9682	0.9685	0.9711	0.9880
2 US	0.9671	0.9671	0.9671	0.9671	0.9671	0.9672	0.9678	0.9730	0.9950
5 US	0.9641	0.9641	0.9641	0.9641	0.9642	0.9643	0.9658	0.9775	0.9988
10 US	0.9592	0.9592	0.9592	0.9592	0.9592	0.9596	0.9627	0.9826	0.9990
20 US	0.9496	0.9496	0.9496	0.9496	0.9497	0.9504	0.9571	0.9875	0.9990
50 US	0.9227	0.9227	0.9227	0.9227	0.9230	0.9254	0.9448	0.9905	0.9991
100 US	0.8836	0.8836	0.8836	0.8837	0.8843	0.8907	0.9349	0.9917	0.9995
200 US	0.8222	0.8222	0.8222	0.8224	0.8243	0.8420	0.9345	0.9935	1.0000
500 US	0.7193	0.7193	0.7194	0.7202	0.7278	0.7913	0.9627	0.9970	1.0000
1 MS	0.6604	0.6604	0.6606	0.6627	0.6828	0.8224	0.9888	0.9995	1.0000
2 MS	0.6399	0.6400	0.6405	0.6456	0.6930	0.9207	0.9991	1.0000	1.0000
5 MS	0.6381	0.6383	0.6398	0.6544	0.7711	0.9958	1.0000	1.0000	1.0000
10 MS	0.6381	0.6385	0.6416	0.6712	0.8613	1.0000	1.0000	1.0000	1.0000
20 MS	0.6381	0.6388	0.6451	0.7025	0.9490	1.0000	1.0000	1.0000	1.0000
50 MS	0.6380	0.6398	0.6555	0.7796	0.9974	1.0000	1.0000	1.0000	1.0000
100 MS	0.6379	0.6414	0.6722	0.8663	0.9999	1.0000	1.0000	1.0000	1.0000
200 MS	0.6376	0.6448	0.7032	0.9506	1.0000	1.0000	1.0000	1.0000	1.0000
500 MS	0.6370	0.6546	0.7795	0.9973	1.0000	1.0000	1.0000	1.0000	1.0000
1 S	0.6362	0.6707	0.8655	0.9998	1.0000	1.0000	1.0000	1.0000	1.0000
2 S	0.6356	0.7014	0.9500	0.9999	1.0000	1.0000	1.0000	1.0000	1.0000
5 S	0.6352	0.7784	0.9974	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10 S	0.6351	0.8655	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
 KP= 6.0000E-05    KD1= 2.0000E+00    KD2= 9.0000E-06  
 DELTA= 8.6000E-01    TD1= 4.0000E-04    TD2= 1.0000E+00  
 THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
 FOLLOWED BY A CONSTANT RATE CF 1.0000E+03 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	10 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9691	0.9691	0.9691	0.9691	0.9691	0.9691	0.9692
1 US	0.9681	0.9681	0.9681	0.9681	0.9682	0.9682	0.9711
2 US	0.9671	0.9671	0.9671	0.9671	0.9671	0.9672	0.9730
5 US	0.9641	0.9641	0.9641	0.9641	0.9642	0.9643	0.9775
10 US	0.9592	0.9592	0.9592	0.9592	0.9592	0.9596	0.9826
20 US	0.9496	0.9496	0.9496	0.9496	0.9497	0.9504	0.9875
50 US	0.9227	0.9227	0.9227	0.9227	0.9230	0.9254	0.9905
100 US	0.8836	0.8836	0.8836	0.8837	0.8843	0.8907	0.9917
200 US	0.8222	0.8222	0.8222	0.8224	0.8243	0.8420	0.9935
500 US	0.7192	0.7193	0.7193	0.7201	0.7277	0.7912	0.9970
1 MS	0.6603	0.6603	0.6605	0.6626	0.6826	0.8223	0.9995
2 MS	0.6396	0.6396	0.6402	0.6453	0.6926	0.9204	1.0000
5 MS	0.6372	0.6373	0.6388	0.6534	0.7702	0.9955	1.0000
10 MS	0.6361	0.6365	0.6396	0.6693	0.8597	0.9996	1.0000
20 MS	0.6340	0.6347	0.6410	0.6986	0.9465	0.9997	1.0000
50 MS	0.6277	0.6295	0.6454	0.7705	0.9942	0.9997	1.0000
100 MS	0.6174	0.6210	0.6522	0.8502	0.9967	0.9997	1.0000
200 MS	0.5973	0.6046	0.6646	0.9241	0.9967	0.9997	1.0000
500 MS	0.5408	0.5594	0.6931	0.9661	0.9967	0.9997	1.0000
1 S	0.4583	0.4959	0.7214	0.9680	0.9967	0.9997	1.0000
2 S	0.3292	0.4036	0.7436	0.9680	0.9967	0.9997	1.0000
5 S	0.1222	0.2794	0.7515	0.9680	0.9967	0.9997	1.0000
10 S	0.0234	0.2378	0.7517	0.9680	0.9967	0.9997	1.0000

10<sup>12</sup>, 10<sup>3</sup>



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
 KP= 6.0000E-05 KD1= 2.0000E+00 KD2= 9.0000E-06  
 DELTA= 8.6000E-01 TD1= 4.0000E-04 TD2= 1.0000E+00  
 THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
 FOLLOWED BY A CONSTANT RATE CF 1.0000E+04 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	1 MS	100 US	10 US	1 US		
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		
25 MS	0.9691	0.9691	C.9691	0.9691	0.9691	0.9691	0.9692	0.9695		
1 US	0.9681	0.9681	C.9681	0.9682	0.9682	0.9685	0.9711	0.9880		
2 US	0.9671	0.9671	C.9671	0.9671	0.9672	0.9678	0.9730	0.9950		
5 US	0.9641	0.9641	C.9641	0.9642	0.9643	0.9658	0.9775	0.9988		
10 US	0.9592	0.9592	C.9592	0.9592	0.9596	C.9627	0.9826	0.9990		
20 US	0.9496	0.9496	C.9496	0.9497	0.9504	0.9571	0.9875	0.9990		
50 US	0.9227	0.9227	C.9227	0.9230	0.9254	0.9448	0.9905	0.9991		
100 US	0.8836	0.8836	C.8836	C.8843	0.8907	0.9348	0.9917	0.9995		
200 US	0.8221	0.8221	C.8223	0.8242	0.8419	0.9345	0.9935	1.0000		
500 US	0.7189	0.7189	C.7198	0.7274	0.7909	0.9626	0.9969	1.0000		
1 MS	0.6594	0.6594	C.6617	0.6818	0.8216	0.9886	0.9994	1.0000		
2 MS	0.6375	0.6375	C.6432	0.6906	0.9191	0.9988	1.0000	1.0000		
5 MS	0.6312	0.6313	C.6475	C.7649	0.9935	0.9998	1.0000	1.0000		
10 MS	0.6237	0.6241	C.6571	0.8499	0.9976	0.9998	1.0000	1.0000		
20 MS	0.6091	0.6094	C.6748	0.9313	0.9976	0.9998	1.0000	1.0000		
50 MS	0.5672	0.5691	C.7162	C.9747	0.9976	0.9998	1.0000	1.0000		
100 MS	0.5037	0.5074	C.7587	C.9766	0.9976	0.9998	1.0000	1.0000		
200 MS	0.3972	0.4051	C.7937	0.9766	0.9976	0.9998	1.0000	1.0000		
500 MS	0.1945	0.2137	C.3593	0.9766	0.9976	0.9998	1.0000	1.0000		
1 S	0.0591	0.0904	C.3072	0.9766	0.9976	C.9998	1.0000	1.0000		
2 S	0.0054	0.0443	C.2954	0.9766	0.9976	C.9998	1.0000	1.0000		
5 S	0.0000	0.0401	C.2947	0.9766	0.9976	0.9998	1.0000	1.0000		
10 S	0.0000	0.0401	C.2947	0.9766	0.9976	C.9998	1.0000	1.0000		

10<sup>12</sup>, 10<sup>4</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 6.0000E-05 KD1= 2.0000E+00 KD2= 9.0000E-06  
DELTA= 8.6000E-01 TC1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+05 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9691	0.9691	0.9691	0.9691	0.9691	0.9691	0.9691
1 US	0.9681	0.9681	0.9681	0.9681	0.9682	0.9682	0.9685
2 US	0.9671	0.9671	0.9671	0.9671	0.9671	0.9672	0.9678
5 US	0.9641	0.9641	0.9641	0.9641	0.9642	0.9643	0.9658
10 US	0.9592	0.9592	0.9592	0.9592	0.9592	0.9596	0.9627
20 US	0.9496	0.9496	0.9496	0.9496	0.9497	0.9504	0.9571
50 US	0.9226	0.9226	0.9226	0.9226	0.9229	0.9253	0.9448
100 US	0.8833	0.8833	0.8833	0.8833	0.8841	0.8905	0.9347
200 US	0.8215	0.8215	0.8215	0.8217	0.8236	0.8413	0.9341
500 US	0.7164	0.7164	0.7165	0.7173	0.7249	0.7887	0.9617
1 MS	0.6530	0.6530	0.6532	0.6553	0.6755	0.8165	0.9873
2 MS	0.6223	0.6223	0.6229	0.6281	0.6760	0.9094	0.9974
5 MS	0.5894	0.5896	0.5911	0.6061	0.7273	0.9794	0.9983
10 MS	0.5409	0.5413	0.5446	0.5759	0.7833	0.9830	0.9998
20 MS	0.4556	0.4564	0.4633	0.5265	0.8318	0.9830	0.9998
50 MS	0.2722	0.2742	0.2917	0.4382	0.8522	0.9830	0.9998
100 MS	0.1153	0.1189	0.1504	0.3860	0.8522	0.9830	0.9998
200 MS	0.0207	0.0259	0.0705	0.3690	0.8522	0.9830	0.9998
500 MS	0.0001	0.0059	0.0549	0.3673	0.8522	0.9830	0.9998
1 S	0.0000	0.0058	0.0547	0.3667	0.8522	0.9830	0.9998
2 S	0.0000	0.0057	0.0546	0.3661	0.8522	0.9830	0.9998
5 S	0.0000	0.0057	0.0545	0.3662	0.8522	0.9830	0.9998
10 S	0.0000	0.0058	0.0547	0.3716	0.8522	0.9830	0.9998

10<sup>12</sup>, 10<sup>5</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 6.00000E-05 K01= 2.00000E+00 K02= 9.00000E-06  
DELTA= 0.60000E-01 T01= 4.00000E-04 T02= 1.00000E+00

THE RADIATION PULSE IS 1.00000E+12 RADS/SEC FOR 2.50000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.00000E+06 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 MS	0.9691	0.9691	0.9491	0.9691	0.9691	0.9691	0.9691	0.9692	0.9693	
1 US	0.9681	0.9681	0.9681	0.9681	0.9681	0.9682	0.9685	0.9711	0.9879	
2 US	0.9671	0.9671	0.9671	0.9671	0.9671	0.9672	0.9678	0.9729	0.9950	
5 US	0.9641	0.9641	0.9641	0.9641	0.9641	0.9643	0.9657	0.9774	0.9988	
10 US	0.9591	0.9591	0.9591	0.9591	0.9592	0.9595	0.9626	0.9825	0.9990	
20 US	0.9494	0.9494	0.9494	0.9494	0.9495	0.9502	0.9569	0.9873	0.9990	
50 US	0.9220	0.9220	0.9220	0.9220	0.9223	0.9247	0.9442	0.9903	0.9991	
100 US	0.8817	0.8817	0.8817	0.8817	0.8824	0.8868	0.9334	0.9914	0.9995	
200 US	0.8168	0.8168	0.8168	0.8170	0.8189	0.8369	0.9314	0.9930	0.9999	
500 US	0.6986	0.6986	0.6987	0.6995	0.7074	0.7731	0.9553	0.9961	0.9999	
1 MS	0.6085	0.6085	0.6087	0.6109	0.6320	0.7809	0.9720	0.9983	0.9999	
2 MS	0.5225	0.5226	0.5232	0.5287	0.5800	0.8434	0.9869	0.9987	0.9999	
5 MS	0.3590	0.3592	0.3608	0.3772	0.5135	0.8877	0.9876	0.9987	0.9999	
10 MS	0.1928	0.1932	0.1965	0.2291	0.4679	0.8884	0.9876	0.9987	0.9999	
20 MS	0.0556	0.0562	0.0618	0.1148	0.4481	0.8884	0.9876	0.9987	0.9999	
50 MS	0.0013	0.0021	0.0092	0.0751	0.4457	0.8884	0.9876	0.9987	0.9999	
100 MS	0.0000	0.0008	0.0090	0.0744	0.4456	0.8884	0.9876	0.9987	0.9999	
200 MS	0.0000	0.0009	0.0080	0.0743	0.4454	0.8884	0.9876	0.9987	0.9999	
500 MS	0.0000	0.0009	0.0079	0.0742	0.4450	0.8884	0.9876	0.9987	0.9999	
1 S	0.0000	0.0008	0.0079	0.0741	0.4476	0.8884	0.9876	0.9987	0.9999	
2 S	0.0000	0.0008	0.0080	0.0750	0.4422	0.8884	0.9876	0.9987	0.9999	
5 S	0.0000	0.0010	0.0098	0.0948	0.4452	0.8884	0.9876	0.9987	0.9999	
10 S	0.0000	0.0017	0.0168	0.1674	0.4432	0.8884	0.9876	0.9987	0.9999	

10<sup>12</sup>, 10<sup>6</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE

OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 6.0000E-05 KD1= 2.0000E+00 KD2= 9.0000E-06  
DELTA= 8.6000E-01 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+07 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9691	0.9691	0.9691	0.9691	0.9691	0.9691	0.9691	0.9692	0.9695
1 US	0.9681	0.9681	0.9681	0.9681	0.9681	0.9681	0.9684	0.9710	0.9878
2 US	0.9670	0.9670	0.9670	0.9670	0.9670	0.9671	0.9676	0.9728	0.9948
5 US	0.9638	0.9638	0.9638	0.9638	0.9638	0.9640	0.9654	0.9771	0.9987
10 US	0.9585	0.9585	0.9585	0.9585	0.9585	0.9589	0.9620	0.9819	0.9989
20 US	0.9480	0.9480	0.9480	0.9480	0.9481	0.9488	0.9536	0.9865	0.9989
50 US	0.9175	0.9175	0.9175	0.9176	0.9178	0.9203	0.9403	0.9891	0.9989
100 US	0.8696	0.8696	0.8696	0.8697	0.8704	0.8772	0.9246	0.9895	0.9991
200 US	0.7835	0.7835	0.7835	0.7837	0.7858	0.8056	0.9120	0.9898	0.9991
500 US	0.5824	0.5824	0.5825	0.5834	0.5925	0.6699	0.9113	0.9905	0.9991
1 MS	0.3650	0.3650	0.3653	0.3678	0.3923	0.5756	0.9155	0.9910	0.9991
2 MS	0.1474	0.1475	0.1480	0.1536	0.2065	0.5325	0.9166	0.9910	0.9991
5 MS	0.0099	0.0100	0.0109	0.0203	0.1052	0.5262	0.9166	0.9910	0.9991
10 MS	0.0001	0.0002	0.0012	0.0111	0.1000	0.5261	0.9166	0.9910	0.9991
20 MS	0.0000	0.0001	0.0011	0.0110	0.0999	0.5261	0.9166	0.9910	0.9991
50 MS	0.0000	0.0001	0.0011	0.0110	0.0999	0.5262	0.9166	0.9910	0.9991
100 MS	0.0000	0.0001	0.0011	0.0110	0.0999	0.5261	0.9166	0.9910	0.9991
200 MS	0.0000	0.0001	0.0011	0.0110	0.1003	0.5520	0.9166	0.9910	0.9991
500 MS	0.0000	0.0001	0.0012	0.0115	0.1117	0.8620	0.9166	0.9910	0.9991
1 S	0.0000	0.0002	0.0017	0.0174	0.1710	0.5236	0.9166	0.9910	0.9991
2 S	0.0000	0.0003	0.0033	0.0333	0.3334	0.5236	0.9166	0.9910	0.9991
5 S	0.0000	0.0008	0.0083	0.0833	0.8333	0.5236	0.9166	0.9910	0.9991
10 S	0.0000	0.0017	0.0157	0.1667	0.0990	0.5236	0.9166	0.9910	0.9991

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 6.0000E-05 KD1= 2.0000E-00 KD2= 9.0000E-06  
DELTA= 8.6000E-01 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 0.0000E+00 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.7968	0.7968	0.7968	0.7968	0.7968	0.7968	0.7968	0.7971	0.7992
1 US	0.7910	0.7910	0.7910	0.7910	0.7910	0.7912	0.7933	0.8128	0.9308
2 US	0.7850	0.7850	0.7850	0.7850	0.7851	0.7855	0.7893	0.8240	0.9686
5 US	0.7676	0.7676	0.7676	0.7676	0.7677	0.7687	0.7789	0.8583	0.9920
10 US	0.7396	0.7396	0.7396	0.7396	0.7398	0.7421	0.7636	0.8958	0.9927
20 US	0.6876	0.6876	0.6876	0.6876	0.6881	0.6929	0.7366	0.9237	0.9928
50 US	0.5584	0.5584	0.5584	0.5586	0.5600	0.5735	0.6829	0.9361	0.9934
100 US	0.4080	0.4080	0.4080	0.4083	0.4114	0.4414	0.6489	0.9431	0.9945
200 US	0.2422	0.2422	0.2423	0.2429	0.2497	0.3132	0.6621	0.9551	0.9999
500 US	0.0919	0.0919	0.0921	0.0940	0.1122	0.2688	0.7897	0.9783	1.0000
1 MS	0.0495	0.0496	0.0500	0.0543	0.0964	0.4079	0.9258	0.9940	1.0000
2 MS	0.0394	0.0395	0.0407	0.0521	0.1585	0.7192	0.9933	1.0000	1.0000
5 MS	0.0326	0.0390	0.0427	0.0791	0.3739	0.9846	1.0000	1.0000	1.0000
10 MS	0.0326	0.0395	0.0475	0.1240	0.6205	0.9999	1.0000	1.0000	1.0000
20 MS	0.0386	0.0404	0.0570	0.2075	0.8604	1.0000	1.0000	1.0000	1.0000
50 MS	0.0385	0.0433	0.0848	0.4129	0.9928	1.0000	1.0000	1.0000	1.0000
100 MS	0.0385	0.0480	0.1294	0.6435	0.9996	1.0000	1.0000	1.0000	1.0000
200 MS	0.0384	0.0573	0.2119	0.8677	0.9997	1.0000	1.0000	1.0000	1.0000
500 MS	0.0381	0.0847	0.4144	0.9913	0.9998	1.0000	1.0000	1.0000	1.0000
1 S	0.0378	0.1285	0.6414	0.9986	1.0000	1.0000	1.0000	1.0000	1.0000
2 S	0.0375	0.2102	0.8645	0.9995	1.0000	1.0000	1.0000	1.0000	1.0000
5 S	0.0373	0.4139	0.9926	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10 S	0.0373	0.6445	0.9999	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

# THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE

## OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 6.0000E-05 K01= 2.0000E+00 K02= 9.0000E-06  
 DELTA= 8.6000E-01 T01= 4.0000E-04 T02= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
 FOLLOWED BY A CONSTANT RATE OF 1.0000E+03 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
 TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.7968	0.7968	0.7968	0.7968	0.7968	0.7968	0.7968	0.7971	0.7992	0.7992
1 US	0.7910	0.7910	0.7910	0.7910	0.7910	0.7912	0.7933	0.8128	0.9308	0.9308
2 US	0.7850	0.7850	0.7850	0.7850	0.7851	0.7855	0.7893	0.8240	0.9686	0.9686
5 US	0.7676	0.7676	0.7676	0.7676	0.7677	0.7687	0.7789	0.8583	0.9920	0.9920
10 US	0.7396	0.7396	0.7396	0.7396	0.7398	0.7421	0.7636	0.8958	0.9927	0.9927
20 US	0.6876	0.6876	0.6876	0.6876	0.6881	0.6929	0.7366	0.9237	0.9928	0.9928
50 US	0.5584	0.5584	0.5584	0.5584	0.5600	0.5735	0.6829	0.9361	0.9934	0.9934
100 US	0.4080	0.4080	0.4080	0.4083	0.4114	0.4414	0.6489	0.9431	0.9945	0.9945
200 US	0.2422	0.2422	0.2423	0.2429	0.2497	0.3132	0.6621	0.9551	1.0000	1.0000
500 US	0.0919	0.0919	0.0921	0.0940	0.1122	0.2688	0.7897	0.9783	1.0000	1.0000
1 MS	0.0495	0.0495	0.0500	0.0543	0.0964	0.4079	0.9257	0.9940	1.0000	1.0000
2 MS	0.0394	0.0395	0.0407	0.0521	0.1585	0.7191	0.9932	1.0000	1.0000	1.0000
5 MS	0.0385	0.0390	0.0427	0.0790	0.3736	0.9843	1.0000	1.0000	1.0000	1.0000
10 MS	0.0385	0.0394	0.0474	0.1238	0.6196	0.9995	1.0000	1.0000	1.0000	1.0000
20 MS	0.0383	0.0402	0.0567	0.2067	0.8585	0.9996	1.0000	1.0000	1.0000	1.0000
50 MS	0.0379	0.0426	0.0439	0.4097	0.9897	0.9997	1.0000	1.0000	1.0000	1.0000
100 MS	0.0373	0.0466	0.1268	0.6346	0.9964	0.9997	1.0000	1.0000	1.0000	1.0000
200 MS	0.0359	0.0543	0.2644	0.8483	0.9965	0.9997	1.0000	1.0000	1.0000	1.0000
500 MS	0.0323	0.0755	0.3830	0.9609	0.9965	0.9997	1.0000	1.0000	1.0000	1.0000
1 S	0.0272	0.1053	0.5536	0.9668	0.9967	0.9997	1.0000	1.0000	1.0000	1.0000
2 S	0.0194	0.1490	0.6586	0.9676	0.9967	0.9997	1.0000	1.0000	1.0000	1.0000
5 S	0.0072	0.2091	0.7504	0.9680	0.9967	0.9997	1.0000	1.0000	1.0000	1.0000
10 S	0.0014	0.2296	0.7517	0.9680	0.9967	0.9997	1.0000	1.0000	1.0000	1.0000

10<sup>3</sup>, 10<sup>3</sup>



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
KP= 6.0000E-05 K01= 2.0000E+00 K02= 9.0000E-06  
DELTA= 8.6000E-01 T01= 4.0000E-04 T02= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+04 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.7968	0.7968	0.7968	0.7968	0.7968	0.7968	0.7968	0.7971	0.7992
1 US	0.7910	0.7910	0.7910	0.7910	0.7910	0.7912	0.7933	0.8128	0.9308
2 US	0.7850	0.7850	0.7850	0.7850	0.7851	0.7855	0.7893	0.8240	0.9686
5 US	0.7676	0.7676	0.7676	0.7676	0.7677	0.7687	0.7789	0.8583	0.9920
10 US	0.7396	0.7396	0.7396	0.7396	0.7398	0.7421	0.7636	0.8958	0.9927
20 US	0.6876	0.6876	0.6876	0.6876	0.6881	0.6929	0.7366	0.9237	0.9928
50 US	0.5584	0.5584	0.5584	0.5586	0.5600	0.5735	0.6828	0.9361	0.9934
100 US	0.4080	0.4080	0.4080	0.4083	0.4114	0.4414	0.6489	0.9431	0.9945
200 US	0.2422	0.2422	0.2422	0.2429	0.2497	0.3131	0.6621	0.9551	1.0000
500 US	0.0919	0.0919	0.0921	0.0939	0.1122	0.2688	0.7896	0.9783	1.0000
1 MS	0.0494	0.0495	0.0499	0.0542	0.0963	0.4076	0.9256	0.9940	1.0000
2 MS	0.0393	0.0394	0.0405	0.0519	0.1582	0.7183	0.9930	1.0000	1.0000
5 MS	0.0382	0.0386	0.0423	0.0785	0.3720	0.9825	0.9998	1.0000	1.0000
10 MS	0.0377	0.0386	0.0465	0.1223	0.6145	0.9975	0.9998	1.0000	1.0000
20 MS	0.0368	0.0386	0.0548	0.2022	0.8467	0.9976	0.9998	1.0000	1.0000
50 MS	0.0343	0.0387	0.0781	0.3901	0.9706	0.9976	0.9998	1.0000	1.0000
100 MS	0.0304	0.0389	0.1119	0.5827	0.9765	0.9976	0.9998	1.0000	1.0000
200 MS	0.0239	0.0392	0.1645	0.7412	0.9766	0.9976	0.9998	1.0000	1.0000
500 MS	0.0116	0.0396	0.2474	0.8049	0.9766	0.9976	0.9998	1.0000	1.0000
1 S	0.0035	0.0399	0.2858	0.8066	0.9766	0.9976	0.9998	1.0000	1.0000
2 S	0.0003	0.0401	0.2942	0.8068	0.9766	0.9976	0.9998	1.0000	1.0000
5 S	0.0000	0.0401	0.2947	0.8069	0.9766	0.9976	0.9998	1.0000	1.0000
10 S	0.0000	0.0401	0.2947	0.8069	0.9766	0.9976	0.9998	1.0000	1.0000

10<sup>13</sup>, 10<sup>4</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 6.0000E-05 KN1= 2.0000E+00 KD2= 9.0000E-06  
DELTA= 8.6000E-01 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+05 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.7968	0.7968	0.7968	0.7968	0.7968	0.7968	0.7971
1 US	0.7910	0.7910	0.7910	0.7910	0.7910	0.7912	0.8128
2 US	0.7850	0.7850	0.7850	0.7850	0.7851	0.7855	0.8239
5 US	0.7676	0.7676	0.7676	0.7676	0.7677	0.7687	0.8582
10 US	0.7396	0.7396	0.7396	0.7396	0.7398	0.7421	0.8957
20 US	0.6876	0.6876	0.6876	0.6876	0.6881	0.6929	0.9236
50 US	0.5584	0.5584	0.5584	0.5584	0.5599	0.5735	0.9361
100 US	0.4078	0.4078	0.4078	0.4082	0.4113	0.4412	0.9430
200 US	0.2420	0.2420	0.2420	0.2427	0.2495	0.3129	0.9550
500 US	0.0915	0.0916	0.0918	0.0936	0.1118	0.2682	0.9782
1 MS	0.0489	0.0490	0.0494	0.0538	0.0956	0.4061	0.9939
2 MS	0.0383	0.0384	0.0396	0.0509	0.1561	0.7126	0.9998
5 MS	0.0357	0.0361	0.0396	0.0747	0.3602	0.9690	0.9999
10 MS	0.0327	0.0336	0.0410	0.1120	0.5791	0.9830	0.9998
20 MS	0.0276	0.0291	0.0433	0.1730	0.7685	0.9830	0.9998
50 MS	0.0164	0.0197	0.0482	0.2817	0.8507	0.9830	0.9998
100 MS	0.0070	0.0116	0.0522	0.3456	0.8522	0.9830	0.9998
200 MS	0.0012	0.0068	0.0545	0.3658	0.8522	0.9830	0.9998
500 MS	0.0000	0.0058	0.0545	0.3658	0.8522	0.9830	0.9998
1 S	0.0000	0.0059	0.0545	0.3658	0.8522	0.9830	0.9998
2 S	0.0000	0.0057	0.0545	0.3658	0.8522	0.9830	0.9998
5 S	0.0000	0.0057	0.0545	0.3658	0.8522	0.9830	0.9998
10 S	0.0000	0.0058	0.0545	0.3658	0.8522	0.9830	0.9998

10<sup>13</sup>, 10<sup>5</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 6.0000E-05 KD1= 2.0000E+00 KD2= 9.0000E-06  
DELTA= 8.6000E-01 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+06 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	INF	TAU (TIME CONSTANT)					10 US	100 US	1 MS	10 MS	1 US	1 US
		10 SEC	1 SEC	100 MS	10 MS	1 MS						
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.7968	0.7968	0.7968	0.7968	0.7968	0.7968	0.7968	0.7968	0.7968	0.7968	0.7968	0.7968
1 US	0.7910	0.7910	0.7910	0.7910	0.7910	0.7910	0.7910	0.7910	0.7910	0.7910	0.7910	0.7910
2 US	0.7850	0.7850	0.7850	0.7850	0.7850	0.7850	0.7850	0.7850	0.7850	0.7850	0.7850	0.7850
5 US	0.7675	0.7675	0.7675	0.7675	0.7675	0.7675	0.7675	0.7675	0.7675	0.7675	0.7675	0.7675
10 US	0.7395	0.7395	0.7395	0.7395	0.7395	0.7395	0.7395	0.7395	0.7395	0.7395	0.7395	0.7395
20 US	0.6874	0.6874	0.6874	0.6874	0.6874	0.6874	0.6874	0.6874	0.6874	0.6874	0.6874	0.6874
50 US	0.5580	0.5580	0.5580	0.5580	0.5580	0.5580	0.5580	0.5580	0.5580	0.5580	0.5580	0.5580
100 US	0.4071	0.4071	0.4071	0.4071	0.4071	0.4071	0.4071	0.4071	0.4071	0.4071	0.4071	0.4071
200 US	0.2406	0.2406	0.2406	0.2406	0.2406	0.2406	0.2406	0.2406	0.2406	0.2406	0.2406	0.2406
500 US	0.0893	0.0893	0.0893	0.0893	0.0893	0.0893	0.0893	0.0893	0.0893	0.0893	0.0893	0.0893
1 MS	0.0456	0.0456	0.0456	0.0456	0.0456	0.0456	0.0456	0.0456	0.0456	0.0456	0.0456	0.0456
2 MS	0.0322	0.0322	0.0322	0.0322	0.0322	0.0322	0.0322	0.0322	0.0322	0.0322	0.0322	0.0322
5 MS	0.0217	0.0217	0.0217	0.0217	0.0217	0.0217	0.0217	0.0217	0.0217	0.0217	0.0217	0.0217
10 MS	0.0117	0.0117	0.0117	0.0117	0.0117	0.0117	0.0117	0.0117	0.0117	0.0117	0.0117	0.0117
20 MS	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034
50 MS	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
100 MS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
200 MS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
500 MS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
10 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A MYLAR CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 6.0000E-05 KD1= 2.0000E+00 KD2= 9.0000E-06  
DELTA= 8.6000E-01 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+07 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 MS	0.7968	0.7968	0.7968	0.7968	0.7968	0.7968	0.7968	0.7971	0.7992	
1 US	0.7909	0.7909	0.7909	0.7909	0.7909	0.7911	0.7931	0.8120	0.9276	
2 US	0.7849	0.7849	0.7849	0.7849	0.7850	0.7854	0.7891	0.8235	0.9680	
5 US	0.7673	0.7673	0.7673	0.7673	0.7674	0.7684	0.7784	0.8564	0.9917	
10 US	0.7390	0.7390	0.7390	0.7391	0.7393	0.7415	0.7623	0.8922	0.9926	
20 US	0.6864	0.6864	0.6864	0.6865	0.6870	0.6916	0.7341	0.9207	0.9927	
50 US	0.5553	0.5553	0.5553	0.5554	0.5568	0.5701	0.6779	0.9347	0.9932	
100 US	0.4015	0.4015	0.4016	0.4019	0.4049	0.4345	0.6410	0.9410	0.9942	
200 US	0.2308	0.2308	0.2308	0.2315	0.2382	0.3006	0.6486	0.9516	0.9991	
500 US	0.0744	0.0744	0.0746	0.0763	0.0933	0.2400	0.7547	0.9721	0.9991	
1 MS	0.0274	0.0274	0.0278	0.0313	0.0653	0.3266	0.8620	0.9859	0.9991	
2 MS	0.0091	0.0092	0.0098	0.0165	0.0799	0.4714	0.9125	0.9910	0.9991	
5 MS	0.0006	0.0007	0.0017	0.0113	0.0988	0.5236	0.9166	0.9910	0.9991	
10 MS	0.0000	0.0001	0.0011	0.0110	0.0990	0.5236	0.9166	0.9910	0.9991	
20 MS	0.0000	0.0001	0.0011	0.0110	0.0990	0.5236	0.9166	0.9910	0.9991	
50 MS	0.0000	0.0001	0.0011	0.0110	0.0990	0.5236	0.9166	0.9910	0.9991	
100 MS	0.0000	0.0001	0.0011	0.0110	0.0990	0.5236	0.9166	0.9910	0.9991	
200 MS	0.0000	0.0001	0.0011	0.0110	0.0990	0.5236	0.9166	0.9910	0.9991	
500 MS	0.0000	0.0001	0.0012	0.0119	0.0990	0.5236	0.9166	0.9910	0.9991	
1 S	0.0000	0.0002	0.0017	0.0174	0.0990	0.5236	0.9166	0.9910	0.9991	
2 S	0.0000	0.0003	0.0033	0.0333	0.0990	0.5236	0.9166	0.9910	0.9991	
5 S	0.0000	0.0008	0.0083	0.0833	0.0990	0.5236	0.9166	0.9910	0.9991	
10 S	0.0000	0.0017	0.0167	0.1667	0.0990	0.5236	0.9166	0.9910	0.9991	

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 1.0000E-03 KD1= 7.0000E-02 KD2= 1.0000E-06  
DELTA= 7.0000E-01 TD1= 2.0000E-04 TD2= 5.0000E-01

THE RADIATION PULSE IS 1.0000E+10 RAD/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 0.0000E+0C RAD/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
1 US	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
2 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	0.9998	1.0000
5 US	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	0.9998	0.9998	1.0000
10 US	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	0.9998	0.9999	1.0000
20 US	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	0.9998	1.0000	1.0000
50 US	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	0.9998	1.0000	1.0000
100 US	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	0.9999	1.0000	1.0000
200 US	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	1.0000	1.0000	1.0000
500 US	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	1.0000	1.0000	1.0000
1 MS	0.9997	0.9997	0.9997	0.9997	0.9998	0.9999	1.0000	1.0000	1.0000
2 MS	0.9997	0.9997	0.9997	0.9997	0.9998	1.0000	1.0000	1.0000	1.0000
5 MS	0.9997	0.9997	0.9997	0.9997	0.9998	1.0000	1.0000	1.0000	1.0000
10 MS	0.9997	0.9997	0.9997	0.9997	0.9999	1.0000	1.0000	1.0000	1.0000
20 MS	0.9997	0.9997	0.9997	0.9997	1.0000	1.0000	1.0000	1.0000	1.0000
50 MS	0.9997	0.9997	0.9997	0.9997	1.0000	1.0000	1.0000	1.0000	1.0000
100 MS	0.9997	0.9997	0.9997	0.9997	1.0000	1.0000	1.0000	1.0000	1.0000
200 MS	0.9997	0.9997	0.9997	0.9997	1.0000	1.0000	1.0000	1.0000	1.0000
500 MS	0.9997	0.9997	0.9997	0.9997	1.0000	1.0000	1.0000	1.0000	1.0000
1 S	0.9997	0.9997	0.9997	0.9997	1.0000	1.0000	1.0000	1.0000	1.0000
2 S	0.9997	0.9997	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
5 S	0.9997	0.9997	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10 S	0.9997	0.9997	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 1.00000-03 KC1= 7.00000-02 KD2= 1.00000-06  
DELTA= 7.00000-01 TD1= 2.00000-04 TD2= 5.00000-01

THE RADIATION PULSE IS 1.00000+10 RADS/SEC FOR 2.50000-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.00000+03 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
1 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	0.9998	0.9999
2 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	0.9998	1.0000
5 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	0.9998	1.0000
10 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	0.9999	1.0000
20 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	1.0000	1.0000
50 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	0.9998	1.0000	1.0000
100 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	0.9999	1.0000	1.0000
200 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	1.0000	1.0000	1.0000
500 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	1.0000	1.0000	1.0000
1 MS	0.9996	0.9996	0.9996	0.9996	0.9996	0.9998	1.0000	1.0000	1.0000
2 MS	0.9995	0.9995	0.9995	0.9995	0.9996	0.9999	1.0000	1.0000	1.0000
5 MS	0.9991	0.9991	0.9991	0.9991	0.9993	0.9999	1.0000	1.0000	1.0000
10 MS	0.9985	0.9985	0.9985	0.9986	0.9991	0.9999	1.0000	1.0000	1.0000
20 MS	0.9972	0.9972	0.9972	0.9975	0.9989	0.9999	1.0000	1.0000	1.0000
50 MS	0.9934	0.9934	0.9936	0.9948	0.9987	0.9999	1.0000	1.0000	1.0000
100 MS	0.9871	0.9871	0.9877	0.9919	0.9987	0.9999	1.0000	1.0000	1.0000
200 MS	0.9745	0.9748	0.9759	0.9890	0.9987	0.9999	1.0000	1.0000	1.0000
500 MS	0.9379	0.9394	0.9511	0.9875	0.9987	0.9999	1.0000	1.0000	1.0000
1 S	0.8799	0.8856	0.9233	0.9874	0.9991	0.9999	1.0000	1.0000	1.0000
2 S	0.7744	0.7947	0.9986	0.9874	0.9987	0.9999	1.0000	1.0000	1.0000
5 S	0.5279	0.6187	0.8271	0.9874	0.9987	0.9999	1.0000	1.0000	1.0000
10 S	0.2788	0.4966	0.8267	0.9877	0.9987	0.9999	1.0000	1.0000	1.0000



**THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A PAPER CAPACITOR**

### THE CAPACITOR PARAMETERS USED ARE:

KP= 1.C00C0-03 K01= 7.C0000-C2 K02= 1.00000-06  
DELTA= 7.C00C0-01 T01= 2.000C0-C4 T02= 5.C00C0-C1

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+04 RADS/SEC

**TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.**

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)					
	INF	10 SEC	1 SEC	10C MS	1C MS	1 MS
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
1 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997
2 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997
5 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997
10 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997
20 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997
50 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997
100 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997
200 US	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996
50C US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
1 MS	0.9991	0.9991	0.9991	0.9991	0.9991	0.9991
2 MS	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985
5 MS	0.9966	0.9966	0.9966	0.9966	0.9966	0.9966
1C MS	0.9934	0.9934	0.9934	0.9934	0.9934	0.9934
20 MS	0.9870	0.9871	0.9872	0.9883	0.9945	0.9994
5C MS	0.9683	0.9684	0.9691	0.9750	0.9937	0.9994
10C MS	0.9378	0.9381	0.9408	0.9605	0.9936	0.9997
20C MS	0.8797	0.8808	0.8907	0.9470	0.9936	0.9994
50C MS	0.7260	0.7324	0.7815	0.9401	0.9937	0.9994
1 S	0.5272	0.5477	0.6854	0.9398	0.9940	0.9994
2 S	0.2780	0.3319	0.6244	0.9398	0.9987	0.9994
5 S	0.0407	0.1565	0.6098	0.9399	0.9994	0.9994
1C S	0.0017	0.1356	0.6097	0.9402	0.9996	0.9994

10.10.15

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A PARER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 1.00000-03 KD1= 7.00000-02 KD2= 1.00000-06  
DELTA= 7.00000-01 TD1= 2.00000-04 TD2= 5.00000-01

THE RADIATION PULSE IS 1.00000+10 RADS/SEC FOR 2.50000-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.00000+05 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 MS	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	
1 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	0.9999	
2 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	1.0000	
5 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	1.0000	
10 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9999	1.0000	
20 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9999	1.0000	
50 US	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9997	1.0000	1.0000	
100 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9995	0.9997	1.0000	1.0000	
200 US	0.9991	0.9991	0.9991	0.9991	0.9991	0.9992	0.9997	1.0000	1.0000	
500 US	0.9982	0.9982	0.9982	0.9982	0.9982	0.9986	0.9997	1.0000	1.0000	
1 MS	0.9966	0.9966	0.9966	0.9966	0.9967	0.9979	0.9997	1.0000	1.0000	
2 MS	0.9934	0.9934	0.9934	0.9934	0.9940	0.9972	0.9997	1.0000	1.0000	
5 MS	0.9839	0.9839	0.9839	0.9843	0.9873	0.9968	0.9997	1.0000	1.0000	
10 MS	0.9682	0.9682	0.9684	0.9697	0.9799	0.9968	0.9997	1.0000	1.0000	
20 MS	0.9377	0.9377	0.9383	0.9435	0.9728	0.9968	0.9997	1.0000	1.0000	
50 MS	0.8517	0.8520	0.8552	0.8825	0.9691	0.9968	0.9997	1.0000	1.0000	
100 MS	0.7255	0.7268	0.7381	0.8219	0.9689	0.9971	0.9997	1.0000	1.0000	
200 MS	0.5264	0.5307	0.5662	0.7745	0.9689	0.9968	0.9997	1.0000	1.0000	
500 MS	0.2011	0.2158	0.3307	0.7575	0.9689	0.9968	0.9997	1.0000	1.0000	
1 S	0.0404	0.0657	0.2490	0.7571	0.9693	0.9968	0.9997	1.0000	1.0000	
2 S	0.0016	0.0315	0.2378	0.7571	0.9743	0.9968	0.9997	1.0000	1.0000	
5 S	0.0000	0.0302	0.2376	0.7572	0.9689	0.9968	0.9997	1.0000	1.0000	
10 S	0.0000	0.0302	0.2376	0.7579	0.9689	0.9968	0.9997	1.0000	1.0000	

10.0.105

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A PARER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 1.0000E-03 K01= 7.0000E-C2 KD2= 1.0000E-06  
DELTA= 7.0000E-01 T01= 2.0000E-04 T02= 5.0000E-01

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+06 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
1 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	0.9999
2 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	1.0000
5 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998	1.0000
10 US	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9998	1.0000
20 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9995	0.9998	1.0000
50 US	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990	0.9992	0.9998	1.0000
100 US	0.9982	0.9982	0.9982	0.9982	0.9982	0.9983	0.9989	0.9998	1.0000
200 US	0.9966	0.9966	0.9966	0.9966	0.9966	0.9969	0.9986	0.9998	1.0000
500 US	0.9918	0.9918	0.9918	0.9918	0.9920	0.9936	0.9984	0.9998	1.0000
1 MS	0.9839	0.9839	0.9839	0.9839	0.9846	0.9898	0.9984	0.9998	1.0000
2 MS	0.9682	0.9682	0.9682	0.9685	0.9712	0.9862	0.9984	0.9998	1.0000
5 MS	0.9226	0.9226	0.9228	0.9245	0.9389	0.9843	0.9984	0.9998	1.0000
10 MS	0.8514	0.8514	0.8521	0.8584	0.9049	0.9842	0.9987	0.9998	1.0000
20 MS	0.7250	0.7252	0.7276	0.7494	0.8751	0.9842	0.9984	0.9998	1.0000
50 MS	0.4476	0.4488	0.4594	0.5509	0.8620	0.9842	0.9984	0.9998	1.0000
100 MS	0.2004	0.2034	0.2293	0.4290	0.8615	0.9845	0.9984	0.9998	1.0000
200 MS	0.0402	0.0453	0.0895	0.3869	0.8615	0.9894	0.9984	0.9998	1.0000
500 MS	0.0003	0.0065	0.0587	0.3835	0.8615	0.9842	0.9984	0.9998	1.0000
1 S	0.0000	0.0062	0.0586	0.3835	0.8620	0.9842	0.9984	0.9998	1.0000
2 S	0.0000	0.0062	0.0586	0.3835	0.8690	0.9842	0.9984	0.9998	1.0000
5 S	0.0000	0.0062	0.0586	0.3838	0.8615	0.9842	0.9984	0.9998	1.0000
10 S	0.0000	0.0062	0.0597	0.3886	0.8615	0.9842	0.9984	0.9998	1.0000

10<sup>10</sup>, 10<sup>6</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
KP= 1.00000-03 KC1= 7.00000-02 KD2= 1.00000-06  
DELTA= 7.00000-01 TD1= 2.00000-04 TD2= 5.00000-01

THE RADIATION PULSE IS 1.00000+10 RADS/SEC FOR 2.50000-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.00000+07 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	10C MS	1C MS	1 MS	10C US	10 US	1 US	
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 NS	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	
1 US	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9999	
2 US	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9997	0.9999	
5 US	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9995	0.9999	
10 US	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990	0.9994	0.9999	
20 US	0.9982	0.9982	0.9982	0.9982	0.9982	0.9982	0.9984	0.9993	0.9999	
50 US	0.9958	0.9958	0.9958	0.9958	0.9958	0.9959	0.9967	0.9992	0.9999	
100 US	0.9918	0.9918	0.9918	0.9918	0.9919	0.9922	0.9949	0.9992	0.9999	
200 US	0.9839	0.9839	0.9839	0.9839	0.9841	0.9854	0.9931	0.9992	0.9999	
500 US	0.9605	0.9605	0.9605	0.9606	0.9615	0.9689	0.9921	0.9992	0.9999	
1 MS	0.9226	0.9226	0.9226	0.9230	0.9263	0.9508	0.9920	0.9995	0.9999	
2 MS	0.8512	0.8512	0.8513	0.8526	0.8648	0.9340	0.9920	0.9992	0.9999	
5 MS	0.6685	0.6686	0.6692	0.6761	0.7348	0.9258	0.9920	0.9992	0.9999	
10 MS	0.4469	0.4471	0.4493	0.4701	0.6272	0.9255	0.9924	0.9992	0.9999	
20 MS	0.1957	0.2003	0.2056	0.2559	0.5659	0.9255	0.9971	0.9992	0.9999	
50 MS	0.0178	0.0190	0.0290	0.1201	0.5539	0.9255	0.9920	0.9992	0.9999	
100 MS	0.0003	0.0016	0.0125	0.1105	0.5539	0.9259	0.9920	0.9992	0.9999	
200 MS	0.0000	0.0012	0.0123	0.1104	0.5538	0.9316	0.9920	0.9992	0.9999	
500 MS	0.0000	0.0012	0.0123	0.1104	0.5539	0.9254	0.9920	0.9992	0.9999	
1 S	0.0000	0.0012	0.0123	0.1104	0.5556	0.9254	0.9920	0.9992	0.9999	
2 S	0.0000	0.0012	0.0123	0.1102	0.5770	0.9254	0.9920	0.9992	0.9999	
5 S	0.0000	0.0013	0.0130	0.1202	0.8700	0.9254	0.9920	0.9992	0.9999	
10 S	0.0000	0.0014	0.0178	0.1739	0.5538	0.9254	0.9920	0.9992	0.9999	

1000, 100

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 1.00000-03 KD1= 7.00000-02 KD2= 1.00000-06  
DELTA= 7.00000-01 TD1= 2.00000-04 TD2= 5.00000-01

THE RADIATION PULSE IS 1.00000+11 RADS/SEC FOR 2.50000-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 0.00000+00 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 MS	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9988	
1 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9988	0.9989	0.9995	
2 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9988	0.9988	0.9990	0.9998	
5 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9988	0.9988	0.9992	1.0000	
10 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9989	0.9989	1.0000	1.0000	
200 US	0.9987	0.9987	0.9987	0.9987	0.9988	0.9990	0.9998	1.0000	1.0000	
500 US	0.9987	0.9987	0.9987	0.9987	0.9988	0.9992	1.0000	1.0000	1.0000	
1 MS	0.9987	0.9987	0.9987	0.9987	0.9989	0.9995	1.0000	1.0000	1.0000	
2 MS	0.9987	0.9987	0.9987	0.9988	0.9990	0.9998	1.0000	1.0000	1.0000	
5 MS	0.9987	0.9987	0.9987	0.9988	0.9992	1.0000	1.0000	1.0000	1.0000	
10 MS	0.9987	0.9987	0.9987	0.9989	0.9995	1.0000	1.0000	1.0000	1.0000	
20 MS	0.9987	0.9987	0.9988	0.9990	0.9998	1.0000	1.0000	1.0000	1.0000	
50 MS	0.9987	0.9987	0.9988	0.9992	1.0000	1.0000	1.0000	1.0000	1.0000	
100 MS	0.9987	0.9987	0.9989	0.9995	1.0000	1.0000	1.0000	1.0000	1.0000	
200 MS	0.9987	0.9988	0.9990	0.9998	1.0000	1.0000	1.0000	1.0000	1.0000	
500 MS	0.9987	0.9989	0.9992	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
1 S	0.9987	0.9989	0.9995	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
2 S	0.9987	0.9990	0.9998	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
5 S	0.9987	0.9992	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
10 S	0.9987	0.9995	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE

OF A PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 1.0000E-03 KN1= 7.0000E-02 KD2= 1.0000E-06  
 DELTA= 7.0000E-01 TD1= 2.0000E-04 TD2= 5.0000E-01

THE RADIATION PULSE IS 1.0000E+11 RAD/SEC FOR 2.5000E-08 SEC  
 FOLLOWED BY A CONSTANT RATE OF 1.0000E+03 RAD/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
 TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						10 US	1 MS	100 US	10 US	1 US
	INF	10 SEC	1 SEC	100 MS	10 MS						
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9988
1 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9988	0.9989	0.9995
2 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9988	0.9988	0.9990	0.9998
5 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9988	0.9988	0.9992	1.0000
10 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9988	0.9989	0.9995	1.0000
20 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9988	0.9990	0.9998	1.0000
50 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9988	0.9992	1.0000	1.0000
100 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9988	0.9995	1.0000	1.0000
200 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9989	0.9998	1.0000	1.0000
500 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9992	1.0000	1.0000	1.0000
1 MS	0.9986	0.9986	0.9986	0.9986	0.9987	0.9987	0.9987	0.9995	1.0000	1.0000	1.0000
2 MS	0.9985	0.9985	0.9985	0.9985	0.9987	0.9987	0.9987	0.9997	1.0000	1.0000	1.0000
5 MS	0.9981	0.9981	0.9981	0.9981	0.9982	0.9987	0.9987	0.9999	1.0000	1.0000	1.0000
10 MS	0.9975	0.9975	0.9975	0.9975	0.9976	0.9987	0.9987	0.9999	1.0000	1.0000	1.0000
20 MS	0.9962	0.9962	0.9962	0.9962	0.9967	0.9987	0.9987	0.9999	1.0000	1.0000	1.0000
50 MS	0.9924	0.9924	0.9926	0.9926	0.9942	0.9987	0.9987	0.9999	1.0000	1.0000	1.0000
100 MS	0.9861	0.9861	0.9868	0.9868	0.9913	0.9987	0.9987	0.9999	1.0000	1.0000	1.0000
200 MS	0.9736	0.9736	0.9761	0.9761	0.9889	0.9987	0.9987	0.9999	1.0000	1.0000	1.0000
500 MS	0.9370	0.9385	0.9505	0.9505	0.9875	0.9987	0.9987	0.9999	1.0000	1.0000	1.0000
1 S	0.8790	0.8848	0.9230	0.9230	0.9874	0.9991	0.9991	0.9999	1.0000	1.0000	1.0000
2 S	0.7736	0.7940	0.8585	0.8585	0.9874	0.9987	0.9987	0.9999	1.0000	1.0000	1.0000
5 S	0.5274	0.6184	0.8271	0.8271	0.9874	0.9987	0.9987	0.9999	1.0000	1.0000	1.0000
10 S	0.2785	0.4965	0.8267	0.8267	0.9877	0.9987	0.9987	0.9999	1.0000	1.0000	1.0000

10<sup>11</sup>, 10<sup>3</sup>



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 1.00000-03 KD1= 7.00000-02 KD2= 1.00000-06  
DELTA= 7.00000-01 TD1= 2.00000-04 TD2= 5.00000-01

THE RADIATION PULSE IS 1.00000+11 RADS/SEC FOR 2.50000-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.00000+04 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
10 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987
1 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987
2 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987
5 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987
10 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987
20 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987
50 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987
100 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987
200 US	0.9986	0.9986	0.9986	0.9986	0.9986	0.9986	0.9986	0.9986	0.9986	0.9986
500 US	0.9984	0.9984	0.9984	0.9984	0.9984	0.9984	0.9984	0.9984	0.9984	0.9984
1 MS	0.9981	0.9981	0.9981	0.9981	0.9981	0.9981	0.9981	0.9981	0.9981	0.9981
2 MS	0.9975	0.9975	0.9975	0.9975	0.9975	0.9975	0.9975	0.9975	0.9975	0.9975
5 MS	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955
10 MS	0.9924	0.9924	0.9924	0.9924	0.9924	0.9924	0.9924	0.9924	0.9924	0.9924
20 MS	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860
50 MS	0.9673	0.9673	0.9673	0.9673	0.9673	0.9673	0.9673	0.9673	0.9673	0.9673
100 MS	0.9368	0.9371	0.9399	0.9402	0.9436	0.9494	0.9599	0.9700	0.9800	0.9900
200 MS	0.8788	0.8800	0.8900	0.9000	0.9100	0.9200	0.9300	0.9400	0.9500	0.9600
500 MS	0.7253	0.7317	0.7511	0.7801	0.8200	0.8700	0.9200	0.9700	1.0000	1.0000
1 S	0.5266	0.5472	0.6052	0.6852	0.7940	0.9394	0.9999	1.0000	1.0000	1.0000
2 S	0.2777	0.3317	0.4244	0.5398	0.6987	0.9394	0.9999	1.0000	1.0000	1.0000
5 S	0.0407	0.1565	0.6098	0.9399	0.9936	0.9994	0.9999	1.0000	1.0000	1.0000
10 S	0.0017	0.1356	0.6097	0.9402	0.9936	0.9994	0.9999	1.0000	1.0000	1.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE

OF A PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 1.0000E-03 KD1= 7.0000E-02 KD2= 1.0000E-06  
 DELTA= 7.0000E-01 TR1= 2.0000E-04 TD2= 5.0000E-01

THE RADIATION PULSE IS 1.0000E+11 RAD/S/SEC FOR 2.5000E-08 SEC  
 FOLLOWED BY A CONSTANT RATE CF 1.0000E+05 RAD/S/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
 TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	INF	TAU (TIME CONSTANT)						10 US	100 US	1 MS	10 MS	1 US	1 US
		10 SEC	1 SEC	10C MS	10 MS	1 MS	100 US						
25 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987
2 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987
5 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987
10 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987
20 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987
50 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987
100 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987
200 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987
500 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987
1 MS	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955	0.9955
2 MS	0.9924	0.9924	0.9924	0.9924	0.9924	0.9924	0.9924	0.9924	0.9924	0.9924	0.9924	0.9924	0.9924
5 MS	0.9829	0.9829	0.9829	0.9829	0.9829	0.9829	0.9829	0.9829	0.9829	0.9829	0.9829	0.9829	0.9829
10 MS	0.9672	0.9672	0.9672	0.9672	0.9672	0.9672	0.9672	0.9672	0.9672	0.9672	0.9672	0.9672	0.9672
20 MS	0.9367	0.9367	0.9367	0.9367	0.9367	0.9367	0.9367	0.9367	0.9367	0.9367	0.9367	0.9367	0.9367
50 MS	0.8508	0.8512	0.8512	0.8512	0.8512	0.8512	0.8512	0.8512	0.8512	0.8512	0.8512	0.8512	0.8512
100 MS	0.7247	0.7261	0.7261	0.7261	0.7261	0.7261	0.7261	0.7261	0.7261	0.7261	0.7261	0.7261	0.7261
200 MS	0.5259	0.5301	0.5301	0.5301	0.5301	0.5301	0.5301	0.5301	0.5301	0.5301	0.5301	0.5301	0.5301
500 MS	0.2009	0.2156	0.2156	0.2156	0.2156	0.2156	0.2156	0.2156	0.2156	0.2156	0.2156	0.2156	0.2156
1 S	0.0404	0.0657	0.0657	0.0657	0.0657	0.0657	0.0657	0.0657	0.0657	0.0657	0.0657	0.0657	0.0657
2 S	0.0016	0.0315	0.0315	0.0315	0.0315	0.0315	0.0315	0.0315	0.0315	0.0315	0.0315	0.0315	0.0315
5 S	0.0000	0.0302	0.0302	0.0302	0.0302	0.0302	0.0302	0.0302	0.0302	0.0302	0.0302	0.0302	0.0302
10 S	0.0000	0.0302	0.0302	0.0302	0.0302	0.0302	0.0302	0.0302	0.0302	0.0302	0.0302	0.0302	0.0302

10", 10 S

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
KP= 1.00000-03 K01= 7.00000-02 K02= 1.00000-06  
DELTA= 7.00000-01 T01= 2.00000-04 T02= 5.00000-01

THE RADIATION PULSE IS 1.00000+11 RADDS/SEC FOR 2.50000-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.00000+06 RADDS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	1 MS	100 US	1 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9988
1 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9995
2 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9998
5 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	1.0000
10 US	0.9986	0.9986	0.9986	0.9986	0.9986	0.9987	1.0000
20 US	0.9984	0.9984	0.9984	0.9984	0.9985	0.9987	1.0000
50 US	0.9980	0.9980	0.9980	0.9980	0.9980	0.9986	1.0000
100 US	0.9972	0.9972	0.9972	0.9972	0.9974	0.9985	1.0000
200 US	0.9956	0.9956	0.9956	0.9956	0.9961	0.9984	1.0000
500 US	0.9908	0.9908	0.9908	0.9910	0.9930	0.9984	1.0000
1 MS	0.9829	0.9829	0.9829	0.9837	0.9895	0.9984	1.0000
2 MS	0.9672	0.9672	0.9672	0.9703	0.9861	0.9984	1.0000
5 MS	0.9217	0.9217	0.9219	0.9384	0.9843	0.9984	1.0000
10 MS	0.8505	0.8506	0.8512	0.9045	0.9842	0.9987	1.0000
20 MS	0.7242	0.7245	0.7258	0.9750	0.9842	0.9984	1.0000
50 MS	0.4472	0.4484	0.4590	0.9506	0.9842	0.9984	1.0000
100 MS	0.2002	0.2032	0.2291	0.9289	0.9845	0.9984	1.0000
200 MS	0.0401	0.0453	0.0895	0.9069	0.9894	0.9984	1.0000
500 MS	0.0003	0.0065	0.0587	0.9035	0.9842	0.9984	1.0000
1 S	0.0000	0.0062	0.0586	0.9035	0.9842	0.9984	1.0000
2 S	0.0000	0.0062	0.0586	0.9035	0.9842	0.9984	1.0000
5 S	0.0000	0.0062	0.0586	0.9035	0.9842	0.9984	1.0000
10 S	0.0000	0.0062	0.0587	0.9035	0.9842	0.9984	1.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 1.0000E-03 K01= 7.0000E-02 K02= 1.0000E-06  
DELTA= 7.0000E-01 TD1= 2.0000E-04 TD2= 5.0000E-01

THE RADIATION PULSE IS 1.0000E+11 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+07 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)					1 MS	100 US	10 US	1 US
	INF	10 SEC	1 SEC	100 MS	10 MS				
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9988
1 US	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9987	0.9988	0.9995
2 US	0.9986	0.9986	0.9986	0.9986	0.9986	0.9986	0.9986	0.9988	0.9998
5 US	0.9984	0.9984	0.9984	0.9984	0.9984	0.9984	0.9984	0.9989	0.9999
10 US	0.9980	0.9980	0.9980	0.9980	0.9980	0.9980	0.9981	0.9990	0.9999
20 US	0.9972	0.9972	0.9972	0.9972	0.9972	0.9972	0.9975	0.9991	0.9999
50 US	0.9948	0.9948	0.9948	0.9948	0.9948	0.9949	0.9961	0.9992	0.9999
100 US	0.9908	0.9908	0.9908	0.9908	0.9909	0.9913	0.9945	0.9992	0.9999
200 US	0.9829	0.9829	0.9829	0.9829	0.9831	0.9846	0.9930	0.9992	0.9999
500 US	0.9595	0.9595	0.9595	0.9596	0.9605	0.9683	0.9921	0.9992	0.9999
1 MS	0.9216	0.9217	0.9217	0.9220	0.9254	0.9504	0.9920	0.9992	0.9999
2 MS	0.8503	0.8503	0.8505	0.8518	0.8641	0.9339	0.9920	0.9992	0.9999
5 MS	0.6678	0.6679	0.6686	0.6754	0.7343	0.9258	0.9920	0.9992	0.9999
10 MS	0.4464	0.4467	0.4488	0.4697	0.6270	0.9255	0.9924	0.9992	0.9999
20 MS	0.1995	0.2001	0.2054	0.2557	0.5659	0.9255	0.9971	0.9992	0.9999
50 MS	0.0178	0.0189	0.0290	0.1200	0.5539	0.9255	0.9920	0.9992	0.9999
100 MS	0.0003	0.0016	0.0125	0.1105	0.5539	0.9259	0.9920	0.9992	0.9999
200 MS	0.0000	0.0012	0.0123	0.1104	0.5538	0.9316	0.9920	0.9992	0.9999
500 MS	0.0000	0.0012	0.0123	0.1104	0.5539	0.9254	0.9920	0.9992	0.9999
1 S	0.0000	0.0012	0.0123	0.1104	0.5556	0.9254	0.9920	0.9992	0.9999
2 S	0.0000	0.0012	0.0123	0.1108	0.5770	0.9254	0.9920	0.9992	0.9999
5 S	0.0000	0.0013	0.0130	0.1202	0.8700	0.9254	0.9920	0.9992	0.9999
10 S	0.0000	0.0019	0.0178	0.1739	0.5538	0.9254	0.9920	0.9992	0.9999

10", 107

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
KP= 1.0000E-03 KD1= 7.0000E-02 KD2= 1.0000E-06  
DELTA= 7.0000E-01 T01= 2.0000E-04 T02= 5.0000E-01

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 0.0000E+00 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
1 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
2 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
5 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
10 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
20 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
50 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
100 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
200 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
500 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
1 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
2 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
5 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
10 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
20 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
50 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
100 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
200 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
500 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
1 S	0.9936	0.9943	0.9577	1.0000	1.0000	1.0000	1.0000
2 S	0.9936	0.9949	0.9991	1.0000	1.0000	1.0000	1.0000
5 S	0.9936	0.9961	1.0000	1.0000	1.0000	1.0000	1.0000
10 S	0.9936	0.9977	1.0000	1.0000	1.0000	1.0000	1.0000

10<sup>12</sup>, 0

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 1.0000E-03 KD1= 7.0000E-02 KD2= 1.0000E-06  
DELTA= 7.0000E-01 TD1= 2.0000E-04 TD2= 5.0000E-01

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+03 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
1 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
2 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
5 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
10 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
20 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
50 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
100 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
200 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
500 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
1 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
2 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
5 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
10 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
20 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
50 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
100 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
200 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
500 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
1 S	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
2 S	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
5 S	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
10 S	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937

10<sup>12</sup>, 10<sup>3</sup>



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
KP= 1.00000-03 KD1= 7.00000-02 KD2= 1.00000-06  
DELTA= 7.00000-01 TD1= 2.00000-04 TD2= 5.00000-01

THE RADIATION PULSE IS 1.00000+12 RADS/SEC FOR 2.50000-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.00000+04 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	1.0000
1 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
2 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
5 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
10 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
20 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
50 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
100 US	0.9936	0.9936	0.9936	0.9936	0.9937	0.9940	0.9962	0.9999	1.0000	1.0000
200 US	0.9936	0.9936	0.9936	0.9936	0.9937	0.9942	0.9976	1.0000	1.0000	1.0000
500 US	0.9933	0.9933	0.9933	0.9934	0.9937	0.9959	0.9999	1.0000	1.0000	1.0000
1 MS	0.9930	0.9930	0.9930	0.9931	0.9937	0.9973	0.9999	1.0000	1.0000	1.0000
2 MS	0.9924	0.9924	0.9924	0.9925	0.9937	0.9986	0.9999	1.0000	1.0000	1.0000
5 MS	0.9905	0.9905	0.9905	0.9909	0.9936	0.9993	0.9999	1.0000	1.0000	1.0000
10 MS	0.9873	0.9873	0.9874	0.9882	0.9936	0.9994	0.9999	1.0000	1.0000	1.0000
20 MS	0.9810	0.9810	0.9813	0.9833	0.9936	0.9994	0.9999	1.0000	1.0000	1.0000
50 MS	0.9624	0.9625	0.9634	0.9715	0.9936	0.9994	0.9999	1.0000	1.0000	1.0000
100 MS	0.9321	0.9324	0.9356	0.9584	0.9936	0.9994	0.9999	1.0000	1.0000	1.0000
200 MS	0.8743	0.8756	0.8863	0.9463	0.9936	0.9994	0.9999	1.0000	1.0000	1.0000
500 MS	0.7216	0.7282	0.7789	0.9401	0.9937	0.9994	0.9999	1.0000	1.0000	1.0000
1 S	0.5240	0.5448	0.6842	0.9398	0.9940	0.9994	0.9999	1.0000	1.0000	1.0000
2 S	0.2763	0.3305	0.6242	0.9398	0.9940	0.9994	0.9999	1.0000	1.0000	1.0000
5 S	0.0405	0.1563	0.6098	0.9398	0.9940	0.9994	0.9999	1.0000	1.0000	1.0000
10 S	0.0016	0.1356	0.6097	0.9402	0.9940	0.9994	0.9999	1.0000	1.0000	1.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
KP= 1.0000E-03 KC1= 7.0000E-02 KD2= 1.0000E-06  
DELTA= 7.0000E-01 TD1= 2.0000E-04 TD2= 5.0000E-01

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08. SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+05 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 NS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	
1 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	
2 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	
5 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	
10 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	
20 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	
50 US	0.9936	0.9936	0.9936	0.9936	0.9936	0.9936	0.9936	0.9936	0.9936	
100 US	0.9934	0.9934	0.9934	0.9934	0.9934	0.9934	0.9934	0.9934	0.9934	
200 US	0.9931	0.9931	0.9931	0.9931	0.9931	0.9931	0.9931	0.9931	0.9931	
500 US	0.9921	0.9921	0.9921	0.9921	0.9921	0.9921	0.9921	0.9921	0.9921	
1 MS	0.9905	0.9905	0.9905	0.9905	0.9905	0.9905	0.9905	0.9905	0.9905	
2 MS	0.9873	0.9873	0.9873	0.9873	0.9873	0.9873	0.9873	0.9873	0.9873	
5 MS	0.9779	0.9779	0.9779	0.9779	0.9779	0.9779	0.9779	0.9779	0.9779	
10 MS	0.9623	0.9623	0.9623	0.9623	0.9623	0.9623	0.9623	0.9623	0.9623	
20 MS	0.9319	0.9320	0.9327	0.9328	0.9328	0.9328	0.9328	0.9328	0.9328	
50 MS	0.8465	0.8468	0.8503	0.8794	0.9691	0.9968	0.9997	1.0000	1.0000	
100 MS	0.7211	0.7224	0.7341	0.8203	0.9689	0.9968	0.9997	1.0000	1.0000	
200 MS	0.5232	0.5275	0.5636	0.7740	0.9689	0.9968	0.9997	1.0000	1.0000	
500 MS	0.1999	0.2146	0.3299	0.7575	0.9689	0.9968	0.9997	1.0000	1.0000	
1 S	0.0402	0.0655	0.2439	0.7571	0.9693	0.9968	0.9997	1.0000	1.0000	
2 S	0.0016	0.0315	0.2378	0.7571	0.9743	0.9968	0.9997	1.0000	1.0000	
5 S	0.0000	0.0302	0.2376	0.7572	0.9689	0.9968	0.9997	1.0000	1.0000	
10 S	0.0000	0.0302	0.2376	0.7579	0.9689	0.9968	0.9997	1.0000	1.0000	

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 1.00000-03 KD1= 7.00000-02 KD2= 1.00000-06  
DELTA= 7.00000-01 TD1= 2.00000-04 TD2= 5.00000-01

THE RADIATION PULSE IS 1.00000+12 RADS/SEC FOR 2.50000-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.00000+06 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	1.0000
1 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
2 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
3 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937
10 US	0.9936	0.9936	0.9936	0.9936	0.9936	0.9936	0.9936	0.9936	0.9936	0.9936
20 US	0.9934	0.9934	0.9934	0.9934	0.9934	0.9934	0.9934	0.9934	0.9934	0.9934
50 US	0.9929	0.9929	0.9929	0.9929	0.9929	0.9929	0.9929	0.9929	0.9929	0.9929
100 US	0.9921	0.9921	0.9921	0.9921	0.9921	0.9921	0.9921	0.9921	0.9921	0.9921
200 US	0.9905	0.9905	0.9905	0.9905	0.9905	0.9905	0.9905	0.9905	0.9905	0.9905
500 US	0.9857	0.9857	0.9857	0.9857	0.9857	0.9857	0.9857	0.9857	0.9857	0.9857
1 MS	0.9779	0.9779	0.9779	0.9779	0.9779	0.9779	0.9779	0.9779	0.9779	0.9779
2 MS	0.9623	0.9623	0.9623	0.9623	0.9623	0.9623	0.9623	0.9623	0.9623	0.9623
5 MS	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170
10 MS	0.8462	0.8462	0.8462	0.8462	0.8462	0.8462	0.8462	0.8462	0.8462	0.8462
20 MS	0.7205	0.7205	0.7205	0.7205	0.7205	0.7205	0.7205	0.7205	0.7205	0.7205
50 MS	0.4449	0.4449	0.4449	0.4449	0.4449	0.4449	0.4449	0.4449	0.4449	0.4449
100 MS	0.1992	0.1992	0.1992	0.1992	0.1992	0.1992	0.1992	0.1992	0.1992	0.1992
200 MS	0.0399	0.0399	0.0399	0.0399	0.0399	0.0399	0.0399	0.0399	0.0399	0.0399
500 MS	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
1 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
10 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE

OF A PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 1.0000E-03 KN1= 7.0000E-02 KD2= 1.0000E-06  
 DELTA= 7.0000E-01 TD1= 2.0000E-04 TD2= 5.0000E-01

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
 FOLLOWED BY A CONSTANT RATE CF 1.0000E+07 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
 TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9938
1 US	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9937	0.9943	0.9976
2 US	0.9936	0.9936	0.9936	0.9936	0.9936	0.9936	0.9937	0.9947	0.9991
5 US	0.9933	0.9933	0.9933	0.9933	0.9933	0.9934	0.9937	0.9959	0.9999
10 US	0.9929	0.9929	0.9929	0.9929	0.9930	0.9930	0.9936	0.9972	0.9999
20 US	0.9922	0.9922	0.9922	0.9922	0.9922	0.9923	0.9934	0.9985	0.9999
50 US	0.9898	0.9898	0.9898	0.9898	0.9898	0.9902	0.9931	0.9992	0.9999
100 US	0.9858	0.9858	0.9858	0.9858	0.9859	0.9868	0.9927	0.9992	0.9999
200 US	0.9779	0.9779	0.9779	0.9780	0.9782	0.9805	0.9923	0.9992	0.9999
500 US	0.9546	0.9546	0.9546	0.9548	0.9559	0.9653	0.9920	0.9992	0.9999
1 MS	0.9170	0.9170	0.9170	0.9174	0.9212	0.9487	0.9920	0.9992	0.9999
2 MS	0.8460	0.8460	0.8462	0.8475	0.8605	0.9333	0.9920	0.9992	0.9999
5 MS	0.6644	0.6645	0.6652	0.6722	0.7323	0.9258	0.9920	0.9992	0.9999
10 MS	0.4441	0.4444	0.4466	0.4677	0.6262	0.9255	0.9924	0.9992	0.9999
20 MS	0.1985	0.1991	0.2044	0.2549	0.5652	0.9255	0.9971	0.9992	0.9999
50 MS	0.0177	0.0188	0.0289	0.1200	0.5539	0.9255	0.9920	0.9992	0.9999
100 MS	0.0003	0.0016	0.0125	0.1105	0.5539	0.9259	0.9920	0.9992	0.9999
200 MS	0.0000	0.0012	0.0123	0.1104	0.5538	0.9316	0.9920	0.9992	0.9999
500 MS	0.0000	0.0012	0.0123	0.1104	0.5539	0.9254	0.9920	0.9992	0.9999
1 S	0.0000	0.0012	0.0123	0.1104	0.5556	0.9254	0.9920	0.9992	0.9999
2 S	0.0000	0.0012	0.0123	0.1108	0.5770	0.9254	0.9920	0.9992	0.9999
5 S	0.0000	0.0013	0.0130	0.1202	0.8700	0.9254	0.9920	0.9992	0.9999
10 S	0.0000	0.0018	0.0178	0.1739	0.5538	0.9254	0.9920	0.9992	0.9999

10<sup>12</sup>, 10<sup>7</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 1.0000E-03 K01= 7.0000E-02 K02= 1.0000E-06  
DELTA= 7.0000E-01 T01= 2.0000E-04 T02= 5.0000E-01

THE RADIATION PULSE IS 1.0000E+13 RAD/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 0.0000E+00 RAD/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIO OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690
1 US	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690
2 US	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690
5 US	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690
10 US	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690
20 US	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690
50 US	0.9689	0.9689	0.9689	0.9689	0.9689	0.9689	0.9689
100 US	0.9688	0.9688	0.9688	0.9688	0.9688	0.9688	0.9688
200 US	0.9687	0.9687	0.9687	0.9687	0.9687	0.9687	0.9687
500 US	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686
1 MS	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686
2 MS	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686
5 MS	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686
10 MS	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686
20 MS	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686
50 MS	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686
100 MS	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686
200 MS	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686
500 MS	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686
1 S	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686
2 S	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686
5 S	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686
10 S	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 1.0000E-03 KD1= 7.0000E-02 KD2= 1.0000E-06  
DELTA= 7.0000E-01 TD1= 2.0000E-04 TD2= 5.0000E-01

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+03 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 MS	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9691	0.9694	
1 US	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9693	0.9719	0.9884	
2 US	0.9690	0.9690	0.9690	0.9690	0.9690	0.9691	0.9696	0.9746	0.9937	
5 US	0.9690	0.9690	0.9690	0.9690	0.9690	0.9692	0.9705	0.9812	0.9998	
10 US	0.9690	0.9690	0.9690	0.9690	0.9690	0.9693	0.9719	0.9886	1.0000	
20 US	0.9690	0.9690	0.9690	0.9690	0.9690	0.9696	0.9746	0.9938	1.0000	
50 US	0.9689	0.9689	0.9699	0.9689	0.9691	0.9704	0.9811	0.9998	1.0000	
100 US	0.9688	0.9688	0.9698	0.9689	0.9691	0.9718	0.9883	1.0000	1.0000	
200 US	0.9687	0.9687	0.9687	0.9688	0.9693	0.9744	0.9957	1.0000	1.0000	
500 US	0.9686	0.9686	0.9686	0.9687	0.9701	0.9809	0.9997	1.0000	1.0000	
1 MS	0.9685	0.9685	0.9685	0.9688	0.9713	0.9883	1.0000	1.0000	1.0000	
2 MS	0.9683	0.9683	0.9684	0.9690	0.9741	0.9956	1.0000	1.0000	1.0000	
5 MS	0.9680	0.9680	0.9681	0.9695	0.9805	0.9997	1.0000	1.0000	1.0000	
10 MS	0.9674	0.9674	0.9677	0.9704	0.9877	0.9999	1.0000	1.0000	1.0000	
20 MS	0.9661	0.9662	0.9668	0.9720	0.9947	0.9999	1.0000	1.0000	1.0000	
50 MS	0.9624	0.9624	0.9641	0.9761	0.9983	0.9999	1.0000	1.0000	1.0000	
100 MS	0.9563	0.9567	0.9599	0.9806	0.9987	0.9999	1.0000	1.0000	1.0000	
200 MS	0.9442	0.9450	0.9521	0.9849	0.9987	0.9999	1.0000	1.0000	1.0000	
500 MS	0.9087	0.9116	0.9333	0.9873	0.9987	0.9999	1.0000	1.0000	1.0000	
1 S	0.8525	0.8608	0.9133	0.9874	0.9987	0.9999	1.0000	1.0000	1.0000	
2 S	0.7503	0.7749	0.8953	0.9874	0.9987	0.9999	1.0000	1.0000	1.0000	
5 S	0.5115	0.6087	0.8270	0.9874	0.9987	0.9999	1.0000	1.0000	1.0000	
10 S	0.2701	0.4934	0.8567	0.9874	0.9987	0.9999	1.0000	1.0000	1.0000	

10<sup>13</sup>, 10<sup>3</sup>



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
KP= 1.00000-03 KN1= 7.00000-02 KD2= 1.00000-06  
DELTA= 7.00000-01 T01= 2.00000-04 T02= 5.00000-01

THE RADIATION PULSE IS 1.00000+13 RADS/SEC FOR 2.50000-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.00000+04 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	INF	TAU (TIME CONSTANT)						10 US	100 US	1 MS	10 MS	100 MS	1 US
		10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US						
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9691	0.9690	0.9690	0.9690	0.9690	0.9694
1 US	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9719	0.9690	0.9690	0.9690	0.9693	0.9884
2 US	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9746	0.9691	0.9691	0.9691	0.9696	0.9957
5 US	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9812	0.9692	0.9692	0.9692	0.9705	0.9998
10 US	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9886	0.9693	0.9693	0.9693	0.9719	1.0000
20 US	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9958	0.9696	0.9696	0.9696	0.9746	1.0000
50 US	0.9689	0.9689	0.9689	0.9689	0.9689	0.9689	0.9689	0.9998	0.9704	0.9704	0.9704	0.9811	1.0000
100 US	0.9688	0.9688	0.9688	0.9688	0.9688	0.9688	0.9688	1.0000	0.9717	0.9717	0.9717	0.9885	1.0000
200 US	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686	1.0000	0.9743	0.9743	0.9743	0.9957	1.0000
500 US	0.9683	0.9683	0.9683	0.9683	0.9683	0.9683	0.9683	1.0000	0.9807	0.9807	0.9807	0.9997	1.0000
1 MS	0.9680	0.9680	0.9680	0.9680	0.9680	0.9680	0.9680	1.0000	0.9880	0.9880	0.9880	0.9999	1.0000
2 MS	0.9674	0.9674	0.9674	0.9674	0.9674	0.9674	0.9674	1.0000	0.9952	0.9952	0.9952	0.9999	1.0000
5 MS	0.9655	0.9655	0.9655	0.9655	0.9655	0.9655	0.9655	1.0000	0.9992	0.9992	0.9992	0.9999	1.0000
10 MS	0.9624	0.9624	0.9624	0.9624	0.9624	0.9624	0.9624	1.0000	0.9994	0.9994	0.9994	0.9999	1.0000
20 MS	0.9563	0.9564	0.9564	0.9564	0.9564	0.9564	0.9564	1.0000	0.9994	0.9994	0.9994	0.9999	1.0000
50 MS	0.9381	0.9383	0.9383	0.9383	0.9383	0.9383	0.9383	1.0000	0.9994	0.9994	0.9994	0.9999	1.0000
100 MS	0.9086	0.9092	0.9092	0.9092	0.9092	0.9092	0.9092	1.0000	0.9994	0.9994	0.9994	0.9999	1.0000
200 MS	0.8522	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	1.0000	0.9994	0.9994	0.9994	0.9999	1.0000
500 MS	0.7034	0.7109	0.7109	0.7109	0.7109	0.7109	0.7109	1.0000	0.9994	0.9994	0.9994	0.9999	1.0000
1 S	0.5107	0.5328	0.5328	0.5328	0.5328	0.5328	0.5328	1.0000	0.9994	0.9994	0.9994	0.9999	1.0000
2 S	0.2693	0.3248	0.3248	0.3248	0.3248	0.3248	0.3248	1.0000	0.9994	0.9994	0.9994	0.9999	1.0000
5 S	0.0395	0.1557	0.1557	0.1557	0.1557	0.1557	0.1557	1.0000	0.9994	0.9994	0.9994	0.9999	1.0000
10 S	0.0016	0.1356	0.1356	0.1356	0.1356	0.1356	0.1356	1.0000	0.9994	0.9994	0.9994	0.9999	1.0000

10<sup>13</sup>, 10<sup>11</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 1.00000-03 K1= 7.00000-02 KD2= 1.00000-06  
DELTA= 7.00000-01 T01= 2.00000-04 T02= 5.00000-01

THE RADIATION PULSE IS 1.00000+13 RAD/SEC FOR 2.50000-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.00000+03 RAD/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690
1 US	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690
2 US	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690
5 US	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690
10 US	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690
20 US	0.9689	0.9689	0.9689	0.9689	0.9689	0.9689	0.9689
50 US	0.9688	0.9688	0.9688	0.9688	0.9688	0.9688	0.9688
100 US	0.9685	0.9685	0.9685	0.9685	0.9685	0.9685	0.9685
200 US	0.9681	0.9681	0.9681	0.9681	0.9681	0.9681	0.9681
500 US	0.9671	0.9671	0.9671	0.9671	0.9671	0.9671	0.9671
1 MS	0.9655	0.9655	0.9655	0.9655	0.9655	0.9655	0.9655
2 MS	0.9624	0.9624	0.9624	0.9624	0.9624	0.9624	0.9624
5 MS	0.9532	0.9532	0.9532	0.9532	0.9532	0.9532	0.9532
10 MS	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380
20 MS	0.9084	0.9084	0.9084	0.9084	0.9084	0.9084	0.9084
50 MS	0.8251	0.8251	0.8251	0.8251	0.8251	0.8251	0.8251
100 MS	0.7029	0.7029	0.7029	0.7029	0.7029	0.7029	0.7029
200 MS	0.5100	0.5100	0.5100	0.5100	0.5100	0.5100	0.5100
500 MS	0.1949	0.1949	0.1949	0.1949	0.1949	0.1949	0.1949
1 S	0.0392	0.0392	0.0392	0.0392	0.0392	0.0392	0.0392
2 S	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016
5 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
10 S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

10<sup>13</sup> 10<sup>5</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
KP= 1.00000-03 K01= 7.00000-02 K02= 1.00000-06  
DELTA= 7.00000-01 T01= 2.00000-04 T02= 5.00000-01

THE RADIATION PULSE IS 1.00000+13 RADS/SEC FOR 2.50000-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.00000+06 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)					1 MS	100 US	10 US	1 US
	INF	10 SEC	1 SEC	100 MS	10 MS				
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9691	0.9694
1 US	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9693	0.9719	0.9884
2 US	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9696	0.9746	0.9957
5 US	0.9689	0.9689	0.9689	0.9689	0.9689	0.9691	0.9704	0.9811	0.9998
10 US	0.9688	0.9688	0.9688	0.9688	0.9689	0.9692	0.9718	0.9885	1.0000
20 US	0.9687	0.9687	0.9687	0.9687	0.9687	0.9693	0.9743	0.9956	1.0000
50 US	0.9682	0.9682	0.9682	0.9682	0.9683	0.9697	0.9805	0.9996	1.0000
100 US	0.9673	0.9673	0.9673	0.9673	0.9676	0.9703	0.9875	0.9998	1.0000
200 US	0.9657	0.9657	0.9657	0.9657	0.9663	0.9716	0.9943	0.9998	1.0000
500 US	0.9609	0.9609	0.9609	0.9611	0.9626	0.9748	0.9982	0.9998	1.0000
1 MS	0.9532	0.9532	0.9532	0.9536	0.9569	0.9785	0.9984	0.9998	1.0000
2 MS	0.9380	0.9380	0.9381	0.9389	0.9464	0.9821	0.9984	0.9998	1.0000
5 MS	0.8938	0.8939	0.8942	0.8971	0.9215	0.9841	0.9984	0.9998	1.0000
10 MS	0.8248	0.8249	0.8258	0.8344	0.8951	0.9842	0.9984	0.9998	1.0000
20 MS	0.7024	0.7027	0.7054	0.7309	0.8720	0.9842	0.9984	0.9998	1.0000
50 MS	0.4337	0.4350	0.4462	0.5424	0.8619	0.9842	0.9984	0.9998	1.0000
100 MS	0.1942	0.1972	0.2236	0.4267	0.8615	0.9842	0.9984	0.9998	1.0000
200 MS	0.0389	0.0441	0.0895	0.3867	0.8615	0.9842	0.9984	0.9998	1.0000
500 MS	0.0003	0.0065	0.0587	0.3835	0.8615	0.9842	0.9984	0.9998	1.0000
1 S	0.0000	0.0062	0.0586	0.3835	0.8620	0.9842	0.9984	0.9998	1.0000
2 S	0.0000	0.0062	0.0586	0.3835	0.8690	0.9842	0.9984	0.9998	1.0000
5 S	0.0000	0.0062	0.0586	0.3838	0.8615	0.9842	0.9984	0.9998	1.0000
10 S	0.0000	0.0062	0.0587	0.3886	0.8615	0.9842	0.9984	0.9998	1.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 1.0000E-03 KD1= 7.0000E-02 KD2= 1.0000E-06  
DELTA= 7.0000E-01 TD1= 2.0000E-04 TD2= 5.0000E-01

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+07 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	INF	TAU (TIME CONSTANT)						10 US	100 US	1 MS	10 MS	100 MS	1 SEC	10 SEC	100 SEC	1 US
		10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US									
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9691	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9694
1 US	0.9689	0.9689	0.9689	0.9689	0.9689	0.9689	0.9689	0.9719	0.9690	0.9690	0.9689	0.9689	0.9689	0.9689	0.9689	0.9884
2 US	0.9689	0.9689	0.9689	0.9689	0.9689	0.9689	0.9689	0.9745	0.9689	0.9689	0.9689	0.9689	0.9689	0.9689	0.9689	0.9957
5 US	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686	0.9686	0.9809	0.9688	0.9688	0.9686	0.9686	0.9686	0.9686	0.9686	0.9997
10 US	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682	0.9881	0.9685	0.9685	0.9683	0.9683	0.9683	0.9683	0.9683	0.9999
20 US	0.9674	0.9674	0.9674	0.9674	0.9674	0.9674	0.9674	0.9951	0.9681	0.9681	0.9675	0.9675	0.9675	0.9675	0.9675	0.9999
50 US	0.9651	0.9651	0.9651	0.9651	0.9651	0.9651	0.9651	0.9990	0.9667	0.9667	0.9652	0.9652	0.9652	0.9652	0.9652	0.9999
100 US	0.9612	0.9612	0.9612	0.9612	0.9612	0.9612	0.9612	0.9992	0.9636	0.9645	0.9615	0.9615	0.9615	0.9615	0.9615	0.9999
200 US	0.9534	0.9534	0.9534	0.9534	0.9534	0.9534	0.9534	0.9992	0.9604	0.9604	0.9542	0.9542	0.9542	0.9542	0.9542	0.9999
500 US	0.9306	0.9306	0.9306	0.9306	0.9306	0.9306	0.9306	0.9992	0.9507	0.9507	0.9330	0.9330	0.9330	0.9330	0.9330	0.9999
1 MS	0.8938	0.8938	0.8938	0.8938	0.8938	0.8938	0.8938	0.9992	0.9402	0.9402	0.9003	0.9003	0.9003	0.9003	0.9003	0.9999
2 MS	0.8247	0.8247	0.8247	0.8247	0.8247	0.8247	0.8247	0.9992	0.9304	0.9304	0.8430	0.8430	0.8430	0.8430	0.8430	0.9999
5 MS	0.6476	0.6477	0.6477	0.6477	0.6477	0.6477	0.6477	0.9992	0.9257	0.9257	0.7221	0.7221	0.7221	0.7221	0.7221	0.9999
10 MS	0.4329	0.4332	0.4332	0.4332	0.4332	0.4332	0.4332	0.9992	0.9255	0.9255	0.6221	0.6221	0.6221	0.6221	0.6221	0.9999
20 MS	0.1935	0.1941	0.1941	0.1941	0.1941	0.1941	0.1941	0.9992	0.9255	0.9255	0.5651	0.5651	0.5651	0.5651	0.5651	0.9999
50 MS	0.0173	0.0184	0.0184	0.0184	0.0184	0.0184	0.0184	0.9992	0.9255	0.9255	0.5539	0.5539	0.5539	0.5539	0.5539	0.9999
100 MS	0.0003	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.9992	0.9259	0.9259	0.5539	0.5539	0.5539	0.5539	0.5539	0.9999
200 MS	0.0000	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.9992	0.9316	0.9316	0.5538	0.5538	0.5538	0.5538	0.5538	0.9999
500 MS	0.0000	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.9992	0.9254	0.9254	0.5535	0.5535	0.5535	0.5535	0.5535	0.9999
1 S	0.0000	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.9992	0.9254	0.9254	0.5556	0.5556	0.5556	0.5556	0.5556	0.9999
2 S	0.0000	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.9992	0.9254	0.9254	0.5770	0.5770	0.5770	0.5770	0.5770	0.9999
5 S	0.0000	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.9992	0.9254	0.9254	0.8700	0.8700	0.8700	0.8700	0.8700	0.9999
10 S	0.0000	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018	0.9992	0.9254	0.9254	0.5538	0.5538	0.5538	0.5538	0.5538	0.9999

10<sup>13</sup>, 10<sup>7</sup>

# THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE

## OF A OIL FILLED PAPER CAPACITOR

### THE CAPACITOR PARAMETERS USED ARE:

KP= 5.0000E-05 KD1= 4.0000E-01 KD2= 1.0000E-06  
 DELTA= 1.0000E+00 TC1= 4.0000E-04 T02= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-08 SEC  
 FOLLOWED BY A CONSTANT RATE OF 0.0000E+00 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
 TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 MS	0.9876	0.9876	0.9876	0.9876	0.9876	0.9876	0.9876	0.9876	0.9877	
1 US	0.9875	0.9875	0.9875	0.9875	0.9875	0.9875	0.9875	0.9875	0.9875	
2 US	0.9874	0.9874	0.9874	0.9874	0.9874	0.9874	0.9874	0.9874	0.9874	
3 US	0.9871	0.9871	0.9871	0.9871	0.9871	0.9872	0.9877	0.9896	0.9982	
10 US	0.9866	0.9866	0.9866	0.9866	0.9866	0.9867	0.9878	0.9921	0.9998	
20 US	0.9857	0.9857	0.9857	0.9857	0.9857	0.9859	0.9881	0.9948	0.9999	
30 US	0.9829	0.9829	0.9829	0.9830	0.9830	0.9837	0.9888	0.9990	0.9999	
100 US	0.9789	0.9789	0.9789	0.9789	0.9790	0.9805	0.9900	0.9992	1.0000	
200 US	0.9722	0.9722	0.9722	0.9722	0.9726	0.9760	0.9921	0.9994	1.0000	
300 US	0.9598	0.9598	0.9598	0.9599	0.9612	0.9716	0.9962	0.9997	1.0000	
1 MS	0.9520	0.9520	0.9520	0.9523	0.9555	0.9769	0.9989	1.0000	1.0000	
2 MS	0.9491	0.9491	0.9492	0.9500	0.9571	0.9900	0.9999	1.0000	1.0000	
3 MS	0.9489	0.9489	0.9491	0.9512	0.9680	0.9995	1.0000	1.0000	1.0000	
10 MS	0.9489	0.9489	0.9493	0.9536	0.9806	1.0000	1.0000	1.0000	1.0000	
20 MS	0.9488	0.9490	0.9498	0.9580	0.9929	1.0000	1.0000	1.0000	1.0000	
30 MS	0.9488	0.9491	0.9513	0.9689	0.9996	1.0000	1.0000	1.0000	1.0000	
100 MS	0.9488	0.9493	0.9537	0.9811	1.0000	1.0000	1.0000	1.0000	1.0000	
200 MS	0.9488	0.9498	0.9581	0.9931	1.0000	1.0000	1.0000	1.0000	1.0000	
300 MS	0.9488	0.9513	0.9689	0.9996	1.0000	1.0000	1.0000	1.0000	1.0000	
1 S	0.9487	0.9536	0.9811	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
2 S	0.9486	0.9579	0.9930	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
3 S	0.9486	0.9688	0.9996	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
10 S	0.9486	0.9811	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE

OF A OIL FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 5.0000E-05 KN1= 4.0000E-01 KD2= 1.0000E-06  
 DELTA= 1.0000E+00 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-08 SEC  
 FOLLOWED BY A CONSTANT RATE CF 1.0000E+03 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
 TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	1 US
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9876	0.9876	C.9876	C.9876	0.9876	0.9876	0.9877
1 US	0.9875	0.9875	0.9875	0.9875	0.9875	0.9875	0.9953
2 US	0.9874	0.9874	C.9874	C.9874	0.9874	0.9874	0.9982
5 US	0.9871	0.9871	C.9871	C.9871	C.9871	0.9872	0.9998
10 US	0.9866	0.9866	C.9866	C.9866	0.9866	0.9867	0.9999
20 US	0.9857	0.9857	C.9857	C.9857	C.9857	0.9859	0.9999
50 US	0.9829	0.9829	0.9829	C.9830	0.9830	0.9837	0.9999
100 US	0.9789	0.9789	C.9789	C.9789	0.9790	0.9805	1.0000
200 US	0.9721	0.9721	0.9721	C.9722	0.9726	0.9759	1.0000
500 US	0.9597	0.9597	C.9597	C.9599	0.9612	0.9716	1.0000
1 MS	0.9518	0.9518	0.9519	C.9522	0.9554	0.9768	1.0000
2 MS	0.9488	0.9488	C.9489	C.9496	0.9567	0.9898	1.0000
5 MS	0.9479	0.9479	C.9482	C.9503	0.9672	0.9993	1.0000
10 MS	0.9469	0.9470	C.9474	C.9517	0.9793	0.9998	1.0000
20 MS	0.9449	0.9450	C.9460	C.9544	0.9911	0.9998	1.0000
50 MS	0.9390	0.9393	C.9417	C.9610	0.9976	0.9998	1.0000
100 MS	0.9292	0.9298	0.9349	C.9684	0.9979	0.9998	1.0000
200 MS	0.9098	0.9112	C.9225	C.9754	0.9979	0.9998	1.0000
500 MS	0.8542	0.8584	0.8932	C.9782	0.9979	0.9998	1.0000
1 S	0.7688	0.7816	C.8627	C.9793	0.9979	0.9998	1.0000
2 S	0.6226	0.6587	C.8368	C.9793	C.9979	0.9998	1.0000
5 S	0.3307	0.4542	C.8261	C.9793	0.9979	0.9998	1.0000
10 S	0.1151	0.3496	0.8258	C.9793	0.9979	0.9998	1.0000

10<sup>10</sup>, 10<sup>3</sup>



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A OIL FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 5.0000E-05 KD1= 4.0000E-01 KD2= 1.0000E-06  
DELTA= 1.0000E+00 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+04 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9876	0.9876	0.9876	0.9876	0.9876	0.9876	0.9876	0.9876	0.9877
1 US	0.9875	0.9875	0.9875	0.9875	0.9875	0.9875	0.9876	0.9886	0.9953
2 US	0.9874	0.9874	0.9874	0.9874	0.9874	0.9874	0.9876	0.9896	0.9982
5 US	0.9871	0.9871	0.9871	0.9871	0.9871	0.9871	0.9877	0.9921	0.9998
10 US	0.9866	0.9866	0.9866	0.9866	0.9866	0.9867	0.9878	0.9948	0.9999
20 US	0.9856	0.9856	0.9856	0.9856	0.9857	0.9859	0.9881	0.9975	0.9999
50 US	0.9829	0.9829	0.9829	0.9829	0.9830	0.9836	0.9888	0.9990	0.9999
100 US	0.9788	0.9788	0.9788	0.9788	0.9790	0.9804	0.9900	0.9992	1.0000
200 US	0.9720	0.9720	0.9720	0.9720	0.9724	0.9758	0.9920	0.9994	1.0000
500 US	0.9592	0.9592	0.9592	0.9594	0.9607	0.9712	0.9961	0.9997	1.0000
1 MS	0.9505	0.9505	0.9506	0.9509	0.9541	0.9759	0.9987	1.0000	1.0000
2 MS	0.9457	0.9457	0.9458	0.9466	0.9539	0.9883	0.9997	1.0000	1.0000
5 MS	0.9395	0.9396	0.9398	0.9421	0.9605	0.9974	0.9998	1.0000	1.0000
10 MS	0.9297	0.9298	0.9303	0.9353	0.9681	0.9979	0.9998	1.0000	1.0000
20 MS	0.9104	0.9105	0.9118	0.9229	0.9753	0.9979	0.9998	1.0000	1.0000
50 MS	0.8548	0.8553	0.8594	0.8935	0.9792	0.9979	0.9998	1.0000	1.0000
100 MS	0.7696	0.7709	0.7823	0.8631	0.9793	0.9979	0.9998	1.0000	1.0000
200 MS	0.6237	0.6275	0.6597	0.8373	0.9793	0.9979	0.9998	1.0000	1.0000
500 MS	0.3319	0.3460	0.4553	0.8265	0.9793	0.9979	0.9998	1.0000	1.0000
1 S	0.1158	0.1451	0.3502	0.8260	0.9793	0.9979	0.9998	1.0000	1.0000
2 S	0.0141	0.0563	0.3230	0.8259	0.9793	0.9979	0.9998	1.0000	1.0000
5 S	0.0000	0.0453	0.3216	0.8258	0.9793	0.9979	0.9998	1.0000	1.0000
10 S	0.0000	0.0452	0.3215	0.8264	0.9793	0.9979	0.9998	1.0000	1.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A OIL FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 5.0000E-05 KN1= 4.0000E-01 KD2= 1.0000E-06  
DELTA= 1.0000E+00 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+10 RADCS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+05 RADCS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VCLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	INF	TAU (TIME CONSTANT)						10 US	100 US	1 MS	10 MS	1 US	1 US
		10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US						
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9876	0.9876	0.9876	0.9876	0.9876	0.9876	0.9876	0.9876	0.9876	0.9876	0.9876	0.9877	0.9877
1 US	0.9875	0.9875	0.9875	0.9875	0.9875	0.9875	0.9875	0.9875	0.9875	0.9875	0.9886	0.9953	0.9953
2 US	0.9874	0.9874	0.9874	0.9874	0.9874	0.9874	0.9874	0.9874	0.9874	0.9874	0.9896	0.9982	0.9982
5 US	0.9871	0.9871	0.9871	0.9871	0.9871	0.9871	0.9871	0.9877	0.9877	0.9877	0.9921	0.9998	0.9998
10 US	0.9866	0.9866	0.9866	0.9866	0.9866	0.9866	0.9866	0.9878	0.9878	0.9878	0.9948	0.9999	0.9999
20 US	0.9855	0.9855	0.9855	0.9855	0.9855	0.9855	0.9855	0.9880	0.9880	0.9880	0.9975	0.9999	0.9999
50 US	0.9827	0.9827	0.9827	0.9827	0.9827	0.9827	0.9827	0.9886	0.9886	0.9886	0.9990	0.9999	0.9999
100 US	0.9782	0.9782	0.9782	0.9782	0.9782	0.9782	0.9782	0.9896	0.9896	0.9896	0.9991	1.0000	1.0000
200 US	0.9705	0.9705	0.9705	0.9705	0.9705	0.9705	0.9705	0.9913	0.9913	0.9913	0.9993	1.0000	1.0000
500 US	0.9541	0.9541	0.9541	0.9541	0.9541	0.9541	0.9541	0.9947	0.9947	0.9947	0.9996	1.0000	1.0000
1 MS	0.9377	0.9377	0.9377	0.9377	0.9377	0.9377	0.9377	0.9970	0.9970	0.9970	0.9998	1.0000	1.0000
2 MS	0.9159	0.9159	0.9159	0.9159	0.9159	0.9159	0.9159	0.9978	0.9978	0.9978	0.9998	1.0000	1.0000
5 MS	0.8598	0.8598	0.8598	0.8598	0.8598	0.8598	0.8598	0.9979	0.9979	0.9979	0.9998	1.0000	1.0000
10 MS	0.7741	0.7742	0.7753	0.7863	0.8040	0.8265	0.8444	0.9979	0.9979	0.9979	0.9998	1.0000	1.0000
20 MS	0.6274	0.6278	0.6312	0.6627	0.6959	0.7377	0.7644	0.9979	0.9979	0.9979	0.9998	1.0000	1.0000
50 MS	0.3341	0.3355	0.3481	0.4567	0.5566	0.6627	0.7644	0.9979	0.9979	0.9979	0.9998	1.0000	1.0000
100 MS	0.1165	0.1199	0.1462	0.3510	0.6264	0.8264	0.9979	0.9979	0.9979	0.9979	0.9998	1.0000	1.0000
200 MS	0.0143	0.0187	0.0566	0.3237	0.8263	0.9979	0.9979	0.9979	0.9979	0.9979	0.9998	1.0000	1.0000
500 MS	0.0000	0.0048	0.0454	0.3222	0.8262	0.9979	0.9979	0.9979	0.9979	0.9979	0.9998	1.0000	1.0000
1 S	0.0000	0.0047	0.0453	0.3219	0.8266	0.9979	0.9979	0.9979	0.9979	0.9979	0.9998	1.0000	1.0000
2 S	0.0000	0.0047	0.0453	0.3217	0.8342	0.9979	0.9979	0.9979	0.9979	0.9979	0.9998	1.0000	1.0000
5 S	0.0000	0.0047	0.0453	0.3222	0.9991	0.9979	0.9979	0.9979	0.9979	0.9979	0.9998	1.0000	1.0000
10 S	0.0000	0.0047	0.0456	0.3296	0.8258	0.9979	0.9979	0.9979	0.9979	0.9979	0.9998	1.0000	1.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A OIL FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 5.0000E-05 KD1= 4.0000E-01 KD2= 1.0000E-06  
DELTA= 1.0000E+00 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+10 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+06 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9876	0.9876	0.9876	0.9876	0.9876	0.9876	0.9876	0.9876	0.9877	0.9877
1 US	0.9874	0.9874	0.9874	0.9874	0.9874	0.9874	0.9874	0.9874	0.9875	0.9875
2 US	0.9873	0.9873	0.9873	0.9873	0.9873	0.9873	0.9873	0.9873	0.9875	0.9875
3 US	0.9868	0.9868	0.9868	0.9868	0.9868	0.9868	0.9868	0.9868	0.9875	0.9875
10 US	0.9861	0.9861	0.9861	0.9861	0.9861	0.9861	0.9861	0.9861	0.9873	0.9873
20 US	0.9846	0.9846	0.9846	0.9846	0.9846	0.9846	0.9846	0.9846	0.9862	0.9862
50 US	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9849	0.9849
100 US	0.9722	0.9722	0.9722	0.9722	0.9722	0.9722	0.9722	0.9722	0.9808	0.9808
200 US	0.9559	0.9559	0.9559	0.9559	0.9559	0.9559	0.9559	0.9559	0.9741	0.9741
500 US	0.9045	0.9045	0.9045	0.9045	0.9045	0.9045	0.9045	0.9045	0.9610	0.9610
1 MS	0.8183	0.8183	0.8183	0.8183	0.8183	0.8183	0.8183	0.8183	0.9260	0.9260
2 MS	0.6645	0.6645	0.6645	0.6645	0.6645	0.6645	0.6645	0.6645	0.8839	0.8839
5 MS	0.3540	0.3541	0.3541	0.3541	0.3541	0.3541	0.3541	0.3541	0.8443	0.8443
10 MS	0.1239	0.1242	0.1242	0.1242	0.1242	0.1242	0.1242	0.1242	0.8269	0.8269
20 MS	0.0152	0.0156	0.0156	0.0156	0.0156	0.0156	0.0156	0.0156	0.8264	0.8264
50 MS	0.0000	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.8265	0.8265
100 MS	0.0000	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.8270	0.8270
200 MS	0.0000	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.8347	0.8347
500 MS	0.0000	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.9993	0.9993
1 S	0.0000	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.8258	0.8258
2 S	0.0000	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.8258	0.8258
5 S	0.0000	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.8258	0.8258
10 S	0.0000	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.8258	0.8258

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A QIL FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 5.0000E-05 K01= 4.0000E-01 K02= 1.0000E-06  
DELTA= 1.0000E+00 T01= 4.0000E-04 T02= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+10 RAD/S/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+07 RAD/S/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.9876	0.9876	0.9876	0.9876	0.9876	0.9876	0.9876	0.9876	0.9877
1 US	0.9870	0.9870	0.9870	0.9870	0.9870	0.9870	0.9871	0.9882	0.9950
2 US	0.9864	0.9864	0.9864	0.9864	0.9864	0.9864	0.9866	0.9887	0.9976
5 US	0.9846	0.9846	0.9846	0.9846	0.9846	0.9847	0.9852	0.9899	0.9979
10 US	0.9815	0.9815	0.9815	0.9815	0.9815	0.9816	0.9829	0.9913	0.9979
20 US	0.9751	0.9751	0.9751	0.9751	0.9751	0.9754	0.9784	0.9926	0.9979
50 US	0.9541	0.9541	0.9541	0.9541	0.9542	0.9555	0.9655	0.9926	0.9979
100 US	0.9142	0.9142	0.9142	0.9142	0.9146	0.9165	0.9466	0.9911	0.9979
200 US	0.8217	0.8217	0.8217	0.8219	0.8233	0.8371	0.9165	0.9885	0.9979
500 US	0.5303	0.5303	0.5304	0.5312	0.5393	0.6098	0.8659	0.9837	0.9979
1 MS	0.2098	0.2098	0.2100	0.2123	0.2345	0.4095	0.8372	0.9810	0.9979
2 MS	0.0269	0.0269	0.0273	0.0311	0.0679	0.3292	0.8273	0.9848	0.9979
5 MS	0.0000	0.0001	0.0005	0.0042	0.0455	0.3226	0.8265	0.9793	0.9979
10 MS	0.0000	0.0000	0.0005	0.0047	0.0455	0.3226	0.8270	0.9793	0.9979
20 MS	0.0000	0.0000	0.0005	0.0047	0.0455	0.3226	0.8348	0.9793	0.9979
50 MS	0.0000	0.0000	0.0005	0.0047	0.0455	0.3231	0.9995	0.9793	0.9979
100 MS	0.0000	0.0000	0.0005	0.0048	0.0458	0.3305	0.8258	0.9793	0.9979
200 MS	0.0000	0.0001	0.0005	0.0051	0.0491	0.3948	0.8258	0.9793	0.9979
500 MS	0.0000	0.0001	0.0009	0.0085	0.0847	0.8348	0.8258	0.9793	0.9979
1 S	0.0000	0.0002	0.0017	0.0167	0.1667	0.3215	0.8258	0.9793	0.9979
2 S	0.0000	0.0003	0.0033	0.0333	0.3333	0.3215	0.8258	0.9793	0.9979
5 S	0.0000	0.0008	0.0043	0.0433	0.4333	0.3215	0.8258	0.9793	0.9979
10 S	0.0000	0.0017	0.0167	0.1667	0.6652	0.3215	0.8258	0.9793	0.9979

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A OIL-FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
KP= 3.00000E-05 KD1= 4.00000E-01 KD2= 1.00000E-06  
DELTA= 1.00000E+00 TD1= 4.00000E-04 TD2= 1.00000E+00

THE RADIATION PULSE IS 1.00000E+11 RADS/SEC FOR 2.50000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 0.00000E+00 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.8825	0.8825	0.8825	0.8825	0.8825	0.8825	0.8825	0.8826	0.8839
1 US	0.8816	0.8816	0.8816	0.8816	0.8816	0.8817	0.8828	0.8927	0.9557
2 US	0.8807	0.8807	0.8807	0.8808	0.8808	0.8810	0.8831	0.9021	0.9832
5 US	0.8781	0.8781	0.8781	0.8781	0.8782	0.8787	0.8840	0.9253	0.9982
10 US	0.8738	0.8738	0.8738	0.8738	0.8740	0.8750	0.8854	0.9512	0.9990
20 US	0.8655	0.8655	0.8655	0.8655	0.8657	0.8679	0.8883	0.9763	0.9990
50 US	0.8420	0.8420	0.8420	0.8421	0.8427	0.8486	0.8962	0.9904	0.9991
100 US	0.8078	0.8078	0.8078	0.8079	0.8093	0.8223	0.9079	0.9921	0.9996
200 US	0.7540	0.7540	0.7540	0.7543	0.7575	0.7867	0.9270	0.9938	1.0000
500 US	0.6634	0.6634	0.6635	0.6645	0.6748	0.7589	0.9638	0.9571	1.0000
1 MS	0.6113	0.6113	0.6116	0.6141	0.6387	0.8064	0.9892	0.9895	1.0000
2 MS	0.5931	0.5932	0.5938	0.5998	0.6551	0.9155	0.9991	1.0000	1.0000
5 MS	0.5915	0.5917	0.5934	0.6101	0.7432	0.9956	1.0000	1.0000	1.0000
10 MS	0.5915	0.5919	0.5955	0.6291	0.8444	1.0000	1.0000	1.0000	1.0000
20 MS	0.5915	0.5923	0.5995	0.6645	0.9428	1.0000	1.0000	1.0000	1.0000
50 MS	0.5915	0.5935	0.6113	0.7515	0.9971	1.0000	1.0000	1.0000	1.0000
100 MS	0.5914	0.5955	0.6302	0.8493	1.0000	1.0000	1.0000	1.0000	1.0000
200 MS	0.5913	0.5994	0.6653	0.9445	1.0000	1.0000	1.0000	1.0000	1.0000
500 MS	0.5910	0.6109	0.7517	0.9971	1.0000	1.0000	1.0000	1.0000	1.0000
1 S	0.5906	0.6295	0.8491	0.9999	1.0000	1.0000	1.0000	1.0000	1.0000
2 S	0.5903	0.6644	0.9442	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
5 S	0.5901	0.7512	0.9972	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10 S	0.5901	0.8491	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A QIL-FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 5.0000E-05 K01= 4.0000E-01 K02= 1.0000E-06  
DELTA= 1.0000E+00 T01= 4.0000E-04 T02= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+11 RAD/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+03 RAD/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 MS	0.8825	0.8825	0.8825	0.8825	0.8825	0.8825	0.8825	0.8826	0.8839	
1 US	0.8816	0.8816	0.8816	0.8816	0.8816	0.8817	0.8828	0.8927	0.9557	
2 US	0.8807	0.8807	0.8807	0.8808	0.8808	0.8810	0.8831	0.9021	0.9832	
5 US	0.8781	0.8781	0.8781	0.8781	0.8782	0.8787	0.8840	0.9253	0.9982	
10 US	0.8738	0.8738	0.8738	0.8738	0.8740	0.8750	0.8854	0.9512	0.9990	
20 US	0.8655	0.8655	0.8655	0.8655	0.8657	0.8679	0.8883	0.9763	0.9990	
50 US	0.8420	0.8420	0.8420	0.8421	0.8427	0.8486	0.8962	0.9904	0.9991	
100 US	0.8078	0.8078	0.8078	0.8079	0.8093	0.8223	0.9079	0.9921	0.9996	
200 US	0.7540	0.7540	0.7540	0.7543	0.7575	0.7867	0.9270	0.9938	1.0000	
500 US	0.6633	0.6634	0.6635	0.6645	0.6747	0.7588	0.9638	0.9971	1.0000	
1 MS	0.6112	0.6112	0.6115	0.6141	0.6386	0.8064	0.9892	0.9995	1.0000	
2 MS	0.5929	0.5930	0.5936	0.5996	0.6549	0.9154	0.9991	1.0000	1.0000	
5 MS	0.5910	0.5912	0.5929	0.6095	0.7427	0.9954	1.0000	1.0000	1.0000	
10 MS	0.5903	0.5907	0.5943	0.6280	0.8434	0.9998	1.0000	1.0000	1.0000	
20 MS	0.5891	0.5899	0.5970	0.6621	0.9412	0.9998	1.0000	1.0000	1.0000	
50 MS	0.5853	0.5874	0.6052	0.7459	0.9951	0.9998	1.0000	1.0000	1.0000	
100 MS	0.5792	0.5832	0.6181	0.8393	0.9979	0.9998	1.0000	1.0000	1.0000	
200 MS	0.5670	0.5751	0.6418	0.9289	0.9979	0.9998	1.0000	1.0000	1.0000	
500 MS	0.5320	0.5524	0.6977	0.9769	0.9979	0.9998	1.0000	1.0000	1.0000	
1 S	0.4786	0.5190	0.7557	0.9793	0.9979	0.9998	1.0000	1.0000	1.0000	
2 S	0.3874	0.4661	0.8047	0.9793	0.9979	0.9998	1.0000	1.0000	1.0000	
5 S	0.2057	0.3783	0.8252	0.9793	0.9979	0.9998	1.0000	1.0000	1.0000	
10 S	0.0716	0.3335	0.8258	0.9793	0.9979	0.9998	1.0000	1.0000	1.0000	

10<sup>-11</sup>, 10<sup>-10</sup>



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A OIL-FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 5.00000-05 K01= 4.00000-01 K02= 1.00000-06  
DELTA= 1.00000+00 T01= 4.00000-04 T02= 1.00000+00

THE RADIATION PULSE IS 1.00000+11 RADS/SEC FOR 2.50000-00 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.00000+04 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 MS	0.8825	0.8825	0.8825	0.8825	0.8825	0.8825	0.8825	0.8826	0.8839	
1 US	0.8816	0.8816	0.8816	0.8816	0.8816	0.8817	0.8828	0.8927	0.9557	
2 US	0.8807	0.8807	0.8807	0.8808	0.8808	0.8810	0.8831	0.9021	0.9832	
5 US	0.8781	0.8781	0.8781	0.8781	0.8782	0.8787	0.8840	0.9253	0.9982	
10 US	0.8738	0.8738	0.8738	0.8738	0.8740	0.8750	0.8854	0.9512	0.9990	
20 US	0.8654	0.8654	0.8655	0.8655	0.8657	0.8679	0.8883	0.9763	0.9990	
50 US	0.8420	0.8420	0.8420	0.8420	0.8426	0.8486	0.8962	0.9904	0.9991	
100 US	0.8077	0.8077	0.8077	0.8079	0.8092	0.8222	0.9078	0.9921	0.9995	
200 US	0.7539	0.7539	0.7539	0.7542	0.7574	0.7866	0.9269	0.9938	1.0000	
500 US	0.6630	0.6630	0.6631	0.6642	0.6744	0.7585	0.9637	0.9971	1.0000	
1 MS	0.6104	0.6104	0.6107	0.6132	0.6378	0.8057	0.9890	0.9995	1.0000	
2 MS	0.5910	0.5911	0.5917	0.5977	0.6531	0.9141	0.9989	1.0000	1.0000	
5 MS	0.5857	0.5859	0.5876	0.6043	0.7379	0.9936	0.9998	1.0000	1.0000	
10 MS	0.5796	0.5800	0.5836	0.6174	0.8346	0.9979	0.9998	1.0000	1.0000	
20 MS	0.5676	0.5684	0.5756	0.6413	0.9273	0.9979	0.9998	1.0000	1.0000	
50 MS	0.5329	0.5349	0.5531	0.6977	0.9770	0.9979	0.9998	1.0000	1.0000	
100 MS	0.4797	0.4839	0.5199	0.7561	0.9793	0.9979	0.9998	1.0000	1.0000	
200 MS	0.3887	0.3972	0.4672	0.8054	0.9793	0.9979	0.9998	1.0000	1.0000	
500 MS	0.2067	0.2269	0.3793	0.8256	0.9793	0.9979	0.9998	1.0000	1.0000	
1 S	0.0721	0.1056	0.3340	0.8258	0.9793	0.9979	0.9998	1.0000	1.0000	
2 S	0.0088	0.0519	0.3222	0.8258	0.9793	0.9979	0.9998	1.0000	1.0000	
5 S	0.0000	0.0453	0.3216	0.8258	0.9793	0.9979	0.9998	1.0000	1.0000	
10 S	0.0000	0.0452	0.3215	0.8258	0.9793	0.9979	0.9998	1.0000	1.0000	

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A OIL-FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 5.0000E-05 K01= 4.0000E-01 K02= 1.0000E-06  
DELTA= 1.0000E+00 T01= 4.0000E-04 T02= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+11 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+05 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.8825	0.8825	0.8825	0.8825	0.8825	0.8825	0.8825	0.8826	0.8839	0.8839
1 US	0.8816	0.8816	0.8816	0.8816	0.8816	0.8817	0.8828	0.8927	0.9537	0.9537
2 US	0.8807	0.8807	0.8807	0.8807	0.8808	0.8810	0.8831	0.9021	0.9832	0.9832
5 US	0.8781	0.8781	0.8781	0.8781	0.8782	0.8787	0.8840	0.9253	0.9982	0.9982
10 US	0.8738	0.8738	0.8738	0.8738	0.8739	0.8750	0.8854	0.9512	0.9990	0.9990
20 US	0.8654	0.8654	0.8654	0.8654	0.8656	0.8679	0.8882	0.9762	0.9990	0.9990
50 US	0.8417	0.8417	0.8417	0.8418	0.8424	0.8484	0.8960	0.9903	0.9991	0.9991
100 US	0.8072	0.8072	0.8072	0.8074	0.8087	0.8217	0.9075	0.9920	0.9995	0.9995
200 US	0.7527	0.7528	0.7531	0.7531	0.7563	0.7855	0.9263	0.9937	1.0000	1.0000
500 US	0.6595	0.6596	0.6606	0.6606	0.6709	0.7554	0.9624	0.9969	1.0000	1.0000
1 MS	0.6021	0.6022	0.6024	0.6050	0.6297	0.7990	0.9874	0.9993	1.0000	1.0000
2 MS	0.5724	0.5724	0.5731	0.5791	0.6351	0.9017	0.9970	0.9998	1.0000	1.0000
5 MS	0.5360	0.5362	0.5379	0.5550	0.6922	0.9756	0.9979	0.9998	1.0000	1.0000
10 MS	0.4826	0.4830	0.4866	0.5216	0.7532	0.9793	0.9979	0.9998	1.0000	1.0000
20 MS	0.3911	0.3920	0.3995	0.4686	0.8046	0.9793	0.9979	0.9998	1.0000	1.0000
50 MS	0.2083	0.2103	0.2284	0.3802	0.8258	0.9793	0.9979	0.9998	1.0000	1.0000
100 MS	0.0729	0.0763	0.1063	0.3347	0.8258	0.9793	0.9979	0.9998	1.0000	1.0000
200 MS	0.0089	0.0134	0.0522	0.3229	0.8258	0.9793	0.9979	0.9998	1.0000	1.0000
500 MS	0.0000	0.0047	0.0454	0.3222	0.8258	0.9793	0.9979	0.9998	1.0000	1.0000
1 S	0.0000	0.0047	0.0453	0.3219	0.8258	0.9793	0.9979	0.9998	1.0000	1.0000
2 S	0.0000	0.0047	0.0453	0.3217	0.8258	0.9793	0.9979	0.9998	1.0000	1.0000
5 S	0.0000	0.0047	0.0453	0.3222	0.8258	0.9793	0.9979	0.9998	1.0000	1.0000
10 S	0.0000	0.0047	0.0456	0.3296	0.8258	0.9793	0.9979	0.9998	1.0000	1.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE

OF A OIL-FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 5.00000E-05 K01= 4.00000E-01 K02= 1.00000E-06  
 DELTA= 1.00000E+00 T01= 4.00000E-04 T02= 1.00000E+00

THE RADIATION PULSE IS 1.00000E+11 RADDS/SEC FOR 2.50000E-08 SEC  
 FOLLOWED BY A CONSTANT RATE OF 1.00000E+06 RADDS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
 TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)							10 US	1 US
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US		
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.8825	0.8825	0.8825	0.8825	0.8825	0.8825	0.8825	0.8826	0.8839
1 US	0.8816	0.8816	0.8816	0.8816	0.8816	0.8817	0.8827	0.8927	0.9557
2 US	0.8807	0.8807	0.8807	0.8807	0.8807	0.8809	0.8830	0.9020	0.9831
5 US	0.8779	0.8779	0.8779	0.8779	0.8780	0.8785	0.8838	0.9251	0.9982
10 US	0.8734	0.8734	0.8734	0.8734	0.8735	0.8746	0.8850	0.9509	0.9990
20 US	0.8645	0.8645	0.8645	0.8646	0.8648	0.8670	0.8874	0.9758	0.9990
50 US	0.8395	0.8395	0.8395	0.8396	0.8402	0.8462	0.8941	0.9897	0.9991
100 US	0.8023	0.8023	0.8023	0.8024	0.8038	0.8170	0.9039	0.9913	0.9995
200 US	0.7414	0.7414	0.7415	0.7418	0.7450	0.7749	0.9199	0.9927	0.9998
500 US	0.6252	0.6252	0.6253	0.6264	0.6370	0.7250	0.9502	0.9955	0.9998
1 MS	0.5255	0.5255	0.5258	0.5285	0.5545	0.7360	0.9708	0.9975	0.9998
2 MS	0.4153	0.4154	0.4160	0.4224	0.4819	0.7907	0.9787	0.9979	0.9998
5 MS	0.2207	0.2209	0.2226	0.2398	0.3850	0.8254	0.9793	0.9979	0.9998
10 MS	0.0772	0.0776	0.0806	0.1101	0.3358	0.8258	0.9793	0.9979	0.9998
20 MS	0.0095	0.0099	0.0139	0.0526	0.3232	0.8258	0.9793	0.9979	0.9998
50 MS	0.0000	0.0005	0.0048	0.0455	0.3225	0.8258	0.9793	0.9979	0.9998
100 MS	0.0000	0.0005	0.0047	0.0454	0.3225	0.8258	0.9793	0.9979	0.9998
200 MS	0.0000	0.0005	0.0047	0.0454	0.3224	0.8258	0.9793	0.9979	0.9998
500 MS	0.0000	0.0005	0.0047	0.0454	0.3228	0.8258	0.9793	0.9979	0.9998
1 S	0.0000	0.0005	0.0048	0.0456	0.3300	0.8258	0.9793	0.9979	0.9998
2 S	0.0000	0.0005	0.0051	0.0490	0.3943	0.8258	0.9793	0.9979	0.9998
5 S	0.0000	0.0009	0.0085	0.0847	0.8347	0.8258	0.9793	0.9979	0.9998
10 S	0.0000	0.0017	0.0167	0.1667	0.3215	0.8258	0.9793	0.9979	0.9998

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A OIL-FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 5.0000E-05 KD1= 4.0000E-01 KD2= 1.0000E-06  
DELTA= 1.0000E+00 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+11 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+07 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.8825	0.8825	0.8825	0.8825	0.8825	0.8825	0.8825	0.8826	0.8839
1 US	0.8812	0.8812	0.8812	0.8812	0.8812	0.8813	0.8824	0.8923	0.9553
2 US	0.8799	0.8799	0.8799	0.8799	0.8799	0.8801	0.8822	0.9012	0.9826
5 US	0.8759	0.8759	0.8759	0.8759	0.8760	0.8765	0.8818	0.9232	0.9977
10 US	0.8693	0.8693	0.8693	0.8693	0.8694	0.8705	0.8810	0.9478	0.9979
20 US	0.8562	0.8562	0.8562	0.8562	0.8564	0.8587	0.8795	0.9715	0.9979
50 US	0.8173	0.8173	0.8173	0.8174	0.8180	0.8244	0.8754	0.9793	0.9979
100 US	0.7544	0.7544	0.7544	0.7545	0.7561	0.7706	0.8693	0.9793	0.9979
200 US	0.6373	0.6373	0.6373	0.6377	0.6415	0.6767	0.8594	0.9793	0.9979
500 US	0.3665	0.3665	0.3667	0.3679	0.3807	0.4892	0.8416	0.9793	0.9979
1 MS	0.1347	0.1347	0.1350	0.1377	0.1639	0.3667	0.8307	0.9793	0.9979
2 MS	0.0168	0.0168	0.0172	0.0212	0.0390	0.3256	0.8268	0.9793	0.9979
5 MS	0.0000	0.0001	0.0005	0.0048	0.0455	0.3226	0.8265	0.9793	0.9979
10 MS	0.0000	0.0000	0.0005	0.0047	0.0455	0.3226	0.8270	0.9793	0.9979
20 MS	0.0000	0.0000	0.0005	0.0047	0.0455	0.3226	0.8348	0.9793	0.9979
50 MS	0.0000	0.0000	0.0005	0.0047	0.0455	0.3231	0.9995	0.9793	0.9979
100 MS	0.0000	0.0000	0.0005	0.0048	0.0458	0.3305	0.8258	0.9793	0.9979
200 MS	0.0000	0.0001	0.0005	0.0051	0.0491	0.3948	0.8258	0.9793	0.9979
500 MS	0.0000	0.0001	0.0009	0.0085	0.0847	0.8348	0.8258	0.9793	0.9979
1 S	0.0000	0.0002	0.0017	0.0167	0.1667	0.3215	0.8258	0.9793	0.9979
2 S	0.0000	0.0003	0.0033	0.0333	0.3333	0.3215	0.8258	0.9793	0.9979
5 S	0.0000	0.0008	0.0083	0.0833	0.8333	0.3215	0.8258	0.9793	0.9979
10 S	0.0000	0.0017	0.0167	0.1667	0.0452	0.3215	0.8258	0.9793	0.9979

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A OIL-FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 5.0000E-05 KD1= 4.0000E-01 KD2= 1.0000E-06  
DELTA= 1.0000E+00 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 0.0000E+00 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 NS	0.2865	0.2865	0.2865	C.2865	0.2865	0.2865	0.2865	0.2872	0.2935
1 US	0.2837	0.2837	0.2837	C.2837	0.2838	0.2845	0.2915	0.3581	0.7618
2 US	0.2809	0.2809	0.2809	C.2809	0.2810	0.2823	0.2952	0.4116	0.9003
5 US	0.2727	0.2727	0.2727	C.2727	0.2730	0.2764	0.3091	0.5640	0.9873
10 US	0.2596	0.2596	0.2596	C.2597	0.2604	0.2673	0.3326	0.7310	0.9903
20 US	0.2358	0.2358	0.2358	C.2359	0.2372	0.2505	0.3763	0.8620	0.9906
50 US	0.1791	0.1791	0.1791	C.1794	0.1825	0.2122	0.4471	0.9164	0.9913
100 US	0.1183	0.1183	0.1183	C.1189	0.1242	0.1751	0.5149	0.9262	0.9926
200 US	0.0594	0.0594	0.0595	C.0604	0.0692	0.1512	0.5869	0.9415	0.9990
500 US	0.0165	0.0165	0.0167	C.0186	0.0369	0.1946	0.7423	0.9715	1.0000
1 MS	0.0073	0.0073	0.0077	C.0119	0.0518	0.3533	0.9049	0.9920	1.0000
2 MS	0.0054	0.0055	0.0066	C.0178	0.1220	0.6862	0.9511	1.0000	1.0000
5 MS	0.0052	0.0057	0.0094	C.0463	0.3466	0.9826	1.0000	1.0000	1.0000
10 MS	0.0052	0.0062	0.0144	C.0929	0.6039	0.9999	1.0000	1.0000	1.0000
20 MS	0.0052	0.0072	0.0242	C.1793	0.8544	1.0000	1.0000	1.0000	1.0000
50 MS	0.0052	0.0101	0.0531	C.3921	0.9926	1.0000	1.0000	1.0000	1.0000
100 MS	0.0052	0.0151	0.0992	C.6311	0.9997	1.0000	1.0000	1.0000	1.0000
200 MS	0.0052	0.0248	0.1848	C.8636	0.9998	1.0000	1.0000	1.0000	1.0000
500 MS	0.0052	0.0535	0.3950	C.9917	0.9999	1.0000	1.0000	1.0000	1.0000
1 S	0.0052	0.0992	C.6307	C.9989	1.0000	1.0000	1.0000	1.0000	1.0000
2 S	0.0051	0.1842	0.8615	C.9996	1.0000	1.0000	1.0000	1.0000	1.0000
5 S	0.0051	0.3950	C.9926	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10 S	0.0051	0.6330	0.9999	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A OIL-FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 5.0000E-05 KD1= 4.0000E-01 KD2= 1.0000E-06  
DELTA= 1.0000E+00 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+03 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 MS	0.2865	0.2865	0.2865	C.2865	0.2865	0.2865	0.2865	0.2872	0.2935	
1 US	0.2837	0.2837	0.2837	C.2837	0.2838	0.2845	0.2915	0.3581	0.7618	
2 US	0.2809	0.2809	0.2809	C.2809	0.2810	0.2823	0.2952	0.4116	0.9003	
5 US	0.2727	0.2727	0.2727	C.2727	0.2730	0.2764	0.3091	0.5640	0.9873	
10 US	0.2596	0.2596	0.2596	C.2597	0.2604	0.2673	0.3326	0.7310	0.9903	
20 US	0.2358	0.2358	0.2358	C.2359	0.2372	0.2505	0.3703	0.8620	0.9906	
50 US	0.1791	0.1791	0.1791	C.1794	0.1825	0.2122	0.4471	0.9164	0.9913	
100 US	0.1183	0.1183	0.1183	C.1189	0.1242	0.1751	0.5149	0.9262	0.9926	
200 US	0.0594	0.0594	0.0595	C.0604	0.0692	0.1512	0.5869	0.9415	0.9990	
500 US	0.0165	0.0165	0.0167	C.0186	0.0369	0.1946	0.7423	0.9715	1.0000	
1 MS	0.0073	0.0073	0.0077	C.0119	0.0518	0.3533	0.9049	0.9920	1.0000	
2 MS	0.0054	0.0055	0.0066	C.0178	0.1220	0.6861	0.9911	1.0000	1.0000	
5 MS	0.0052	0.0057	0.0094	C.0463	0.3465	0.9824	1.0000	1.0000	1.0000	
10 MS	0.0052	0.0062	0.0144	C.0928	0.6034	0.9996	1.0000	1.0000	1.0000	
20 MS	0.0052	0.0071	0.0241	C.1790	0.8532	0.9998	1.0000	1.0000	1.0000	
50 MS	0.0052	0.0100	0.0528	C.3903	0.9906	0.9998	1.0000	1.0000	1.0000	
100 MS	0.0051	0.0149	0.0982	C.6256	0.9976	0.9998	1.0000	1.0000	1.0000	
200 MS	0.0050	0.0242	0.1811	C.9512	0.9977	0.9998	1.0000	1.0000	1.0000	
500 MS	0.0047	0.0506	0.3764	C.9720	0.9978	0.9998	1.0000	1.0000	1.0000	
1 S	0.0042	0.0892	0.5785	C.9784	0.9979	0.9998	1.0000	1.0000	1.0000	
2 S	0.0034	0.1508	C.7501	C.9790	0.9979	0.9998	1.0000	1.0000	1.0000	
5 S	0.0018	0.2541	C.8235	C.9793	0.9979	0.9998	1.0000	1.0000	1.0000	
10 S	0.0006	0.3073	0.8258	C.9793	0.9979	0.9998	1.0000	1.0000	1.0000	

10<sup>12</sup>, 10<sup>3</sup>



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A OIL-FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 5.0000E-05 K01= 4.0000E-01 K02= 1.0000E-06  
DELTA= 1.0000E+00 T01= 4.0000E-04 T02= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+04 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.2865	0.2865	0.2865	C.2865	0.2865	0.2865	0.2865	0.2872	0.2935
1 US	0.2837	0.2837	0.2837	C.2837	0.2838	0.2845	0.2915	0.3581	0.7618
2 US	0.2809	0.2809	0.2809	C.2809	0.2810	0.2823	0.2952	0.4116	0.9003
5 US	0.2726	0.2726	0.2727	C.2727	0.2730	0.2764	0.3091	0.5640	0.9873
10 US	0.2596	0.2596	0.2596	C.2597	0.2604	0.2673	0.3326	0.7310	0.9903
20 US	0.2358	0.2358	0.2358	C.2359	0.2372	0.2505	0.3703	0.8620	0.9906
50 US	0.1791	0.1791	0.1791	C.1794	0.1825	0.2122	0.4471	0.9164	0.9913
100 US	0.1183	0.1183	0.1183	C.1189	0.1242	0.1751	0.5149	0.9262	0.9926
200 US	0.0594	0.0594	0.0595	C.0604	0.0692	0.1512	0.5869	0.9415	0.9990
500 US	0.0165	0.0165	0.0167	C.0186	0.0369	0.1946	0.7422	0.9715	1.0000
1 MS	0.0073	0.0073	0.0077	C.0119	0.0518	0.3531	0.9047	0.9920	1.0000
2 MS	0.0054	0.0055	0.0066	C.0178	0.1218	0.6854	0.9909	1.0000	1.0000
5 MS	0.0052	0.0056	0.0094	C.0461	0.3452	0.9807	0.9998	1.0000	1.0000
10 MS	0.0051	0.0060	0.0142	C.0920	0.5990	0.9978	0.9998	1.0000	1.0000
20 MS	0.0050	0.0069	0.0236	C.1758	0.8425	0.9979	0.9998	1.0000	1.0000
50 MS	0.0047	0.0094	0.0502	C.3739	0.9728	0.9979	0.9998	1.0000	1.0000
100 MS	0.0042	0.0131	0.0893	C.5791	0.9792	0.9979	0.9998	1.0000	1.0000
200 MS	0.0034	0.0195	0.1513	C.7520	0.9792	0.9979	0.9998	1.0000	1.0000
500 MS	0.0018	0.0319	0.2542	C.8232	0.9793	0.9979	0.9998	1.0000	1.0000
1 S	0.0006	0.0408	0.3068	C.8253	0.9793	0.9979	0.9998	1.0000	1.0000
2 S	0.0001	0.0447	0.3206	C.8256	0.9793	0.9979	0.9998	1.0000	1.0000
5 S	0.0000	0.0452	0.3215	C.8258	0.9793	0.9979	0.9998	1.0000	1.0000
10 S	0.0000	0.0452	0.3215	C.8258	0.9793	0.9979	0.9998	1.0000	1.0000

10<sup>12</sup>, 10<sup>4</sup>

10<sup>12</sup>, 10<sup>4</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A OIL-FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 5.0000E-05 K01= 4.0000E-01 K02= 1.0000E-06  
DELTA= 1.0000E+00 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+05 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 MS	0.2865	0.2865	0.2865	C.2865	0.2865	0.2865	0.2865	0.2872	0.2935	
1 US	0.2837	0.2837	0.2837	C.2837	0.2838	0.2845	0.2915	0.3580	0.7616	
2 US	0.2809	0.2809	0.2809	C.2809	0.2810	0.2823	0.2952	0.4116	0.9003	
5 US	0.2726	0.2726	0.2726	C.2727	0.2730	0.2764	0.3091	0.5639	0.9873	
10 US	0.2596	0.2596	0.2596	C.2597	0.2603	0.2672	0.3326	0.7308	0.9903	
20 US	0.2357	0.2357	0.2357	C.2359	0.2372	0.2505	0.3702	0.8618	0.9905	
50 US	0.1790	0.1790	0.1791	C.1794	0.1824	0.2121	0.4469	0.9164	0.9912	
100 US	0.1182	0.1182	0.1183	C.1188	0.1241	0.1750	0.5147	0.9261	0.9926	
200 US	0.0593	0.0593	0.0594	C.0603	0.0691	0.1310	0.5266	0.9414	0.9990	
500 US	0.0164	0.0164	0.0166	C.0185	0.0367	0.1942	0.7414	0.9713	1.0000	
1 MS	0.0072	0.0072	0.0076	C.0117	0.0515	0.3516	0.9033	0.9918	1.0000	
2 MS	0.0052	0.0053	0.0064	C.0174	0.1202	0.6789	0.9291	0.9998	1.0000	
5 MS	0.0048	0.0052	0.0088	C.0441	0.3324	0.9637	0.9979	0.9998	1.0000	
10 MS	0.0043	0.0051	0.0126	C.0841	0.5566	0.9793	0.9979	0.9998	1.0000	
20 MS	0.0035	0.0050	0.0191	C.1477	0.7461	0.9793	0.9979	0.9998	1.0000	
50 MS	0.0018	0.0049	0.0318	C.2536	0.8241	0.9793	0.9979	0.9998	1.0000	
100 MS	0.0006	0.0048	0.0409	C.3077	0.8258	0.9793	0.9979	0.9998	1.0000	
200 MS	0.0001	0.0047	0.0449	C.3215	0.8258	0.9793	0.9979	0.9998	1.0000	
500 MS	0.0000	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979	0.9998	1.0000	
1 S	0.0000	0.0047	0.0452	C.3215	0.8258	0.9793	0.9979	0.9998	1.0000	
2 S	0.0000	0.0047	0.0452	C.3215	0.8258	0.9793	0.9979	0.9998	1.0000	
5 S	0.0000	0.0047	0.0452	C.3215	0.8258	0.9793	0.9979	0.9998	1.0000	
10 S	0.0000	0.0047	0.0452	C.3215	0.8258	0.9793	0.9979	0.9998	1.0000	

10<sup>12</sup>, 10<sup>5</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A OIL-FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:  
KP= 5.0000E-05 KD1= 4.0000E-01 KD2= 1.0000E-06  
DELTA= 1.0000E+00 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+06 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 NS	0.2865	0.2865	0.2865	0.2865	0.2865	0.2865	0.2865	0.2872	0.2935	
1 US	0.2837	0.2837	0.2837	0.2837	0.2838	0.2845	0.2914	0.3576	0.7598	
2 US	0.2809	0.2809	0.2809	0.2809	0.2810	0.2823	0.2951	0.4114	0.9001	
5 US	0.2726	0.2726	0.2726	0.2726	0.2730	0.2763	0.3089	0.5631	0.9871	
10 US	0.2595	0.2595	0.2595	0.2595	0.2602	0.2671	0.3320	0.7290	0.9903	
20 US	0.2355	0.2355	0.2355	0.2356	0.2370	0.2502	0.3693	0.8604	0.9905	
50 US	0.1786	0.1786	0.1786	0.1789	0.1819	0.2114	0.4452	0.9158	0.9912	
100 US	0.1175	0.1175	0.1175	0.1181	0.1234	0.1740	0.5124	0.9255	0.9925	
200 US	0.0584	0.0584	0.0585	0.0594	0.0681	0.1495	0.5834	0.9405	0.9989	
500 US	0.0156	0.0156	0.0158	0.0176	0.0355	0.1901	0.7342	0.9700	0.9998	
1 MS	0.0063	0.0063	0.0067	0.0106	0.0485	0.3365	0.8897	0.9901	0.9998	
2 MS	0.0038	0.0039	0.0049	0.0146	0.1057	0.6186	0.9711	0.9979	0.9998	
5 MS	0.0020	0.0022	0.0047	0.0293	0.2355	0.8200	0.9793	0.9979	0.9998	
10 MS	0.0007	0.0011	0.0047	0.0401	0.3041	0.8258	0.9793	0.9979	0.9998	
20 MS	0.0001	0.0006	0.0047	0.0449	0.3215	0.8258	0.9793	0.9979	0.9998	
50 MS	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979	0.9998	
100 MS	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979	0.9998	
200 MS	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979	0.9998	
500 MS	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979	0.9998	
1 S	0.0000	0.0005	0.0048	0.0452	0.3215	0.8258	0.9793	0.9979	0.9998	
2 S	0.0000	0.0005	0.0048	0.0452	0.3215	0.8258	0.9793	0.9979	0.9998	
5 S	0.0000	0.0009	0.0085	0.0452	0.3215	0.8258	0.9793	0.9979	0.9998	
10 S	0.0000	0.0017	0.0167	0.0452	0.3215	0.8258	0.9793	0.9979	0.9998	

10<sup>12</sup>, 10<sup>6</sup>

10<sup>12</sup>, 10<sup>6</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A OIL-FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 5.0000E-05 K01= 4.0000E-01 K02= 1.0000E-06  
DELTA= 1.0000E+00 T01= 4.0000E-04 T02= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+12 RADS/SEC FOR 2.5000E-09 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+07 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)									
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US	
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25 NS	0.2865	0.2865	0.2865	0.2865	0.2865	0.2865	0.2865	0.2872	0.2935	
1 US	0.2836	0.2836	0.2836	0.2836	0.2836	0.2843	0.2910	0.3543	0.7463	
2 US	0.2806	0.2806	0.2806	0.2806	0.2807	0.2820	0.2948	0.4102	0.8982	
5 US	0.2720	0.2720	0.2720	0.2720	0.2723	0.2756	0.3074	0.5567	0.9861	
10 US	0.2583	0.2583	0.2583	0.2583	0.2590	0.2655	0.3277	0.7152	0.9898	
20 US	0.2332	0.2332	0.2332	0.2334	0.2346	0.2473	0.3615	0.8490	0.9900	
50 US	0.1738	0.1738	0.1739	0.1742	0.1770	0.2053	0.4313	0.9101	0.9906	
100 US	0.1105	0.1105	0.1105	0.1110	0.1161	0.1643	0.4930	0.9192	0.9918	
200 US	0.0502	0.0502	0.0503	0.0511	0.0593	0.1353	0.5544	0.9318	0.9979	
500 US	0.0091	0.0091	0.0093	0.0108	0.0257	0.1562	0.6681	0.9564	0.9979	
1 MS	0.0016	0.0016	0.0019	0.0044	0.0292	0.2292	0.7722	0.9731	0.9979	
2 MS	0.0002	0.0002	0.0006	0.0044	0.0413	0.3065	0.8216	0.9793	0.9979	
5 MS	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979	
10 MS	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979	
20 MS	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979	
50 MS	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979	
100 MS	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979	
200 MS	0.0000	0.0001	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979	
500 MS	0.0000	0.0001	0.0009	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979	
1 S	0.0000	0.0002	0.0017	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979	
2 S	0.0000	0.0003	0.0033	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979	
5 S	0.0000	0.0008	0.0083	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979	
10 S	0.0000	0.0017	0.0167	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979	

10<sup>12</sup>, 10<sup>7</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A OIL-FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 5.0000E-05 KD1= 4.0000E-01 KD2= 1.0000E-06  
DELTA= 1.0000E+00 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 0.0000E+00 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0020
1 US	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2 US	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
5 US	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10 US	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
20 US	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
50 US	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100 US	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9188
200 US	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9280
500 US	0.0000	0.0079	0.0791	0.7871	1.0000	1.0000	1.0000	1.0000	0.9485
1 MS	0.0000	0.0000	0.0001	0.0014	0.0137	0.1062	0.5170	0.9229	1.0000
2 MS	0.0000	0.0001	0.0005	0.0052	0.0503	0.3798	0.9201	0.9982	1.0000
5 MS	0.0000	0.0003	0.0033	0.0325	0.2801	0.9562	0.9999	1.0000	1.0000
10 MS	0.0000	0.0008	0.0083	0.0796	0.5632	0.9995	1.0000	1.0000	1.0000
20 MS	0.0000	0.0018	0.0181	0.1671	0.8384	0.9998	1.0000	1.0000	1.0000
50 MS	0.0000	0.0048	0.0470	0.3815	0.9898	0.9998	1.0000	1.0000	1.0000
100 MS	0.0000	0.0097	0.0927	0.6204	0.9977	1.0000	1.0000	1.0000	1.0000
200 MS	0.0000	0.0192	0.1763	0.8500	0.9979	1.0000	1.0000	1.0000	1.0000
500 MS	0.0000	0.0466	0.3777	0.9775	0.9985	1.0000	1.0000	1.0000	1.0000
1 S	0.0000	0.0893	0.5997	0.9899	0.9994	1.0000	1.0000	1.0000	1.0000
2 S	0.0000	0.1692	0.8280	0.9963	1.0000	1.0000	1.0000	1.0000	1.0000
5 S	0.0000	0.3784	0.9867	0.9998	1.0000	1.0000	1.0000	1.0000	1.0000
10 S	0.0000	0.6225	0.9999	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A OIL-FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 5.0000E-05 KD1= 4.0000E-01 KD2= 1.0000E-06  
DELTA= 1.0000E+00 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE CF 1.0000E+03 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	INF	TAU (TIME CONSTANT)						10 US	1 MS	100 US	10 US	1 US
		10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US					
25 NS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1 US	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0020
2 US	0.0000	0.3215	0.8258	0.9793	0.9979	0.9998	0.9998	1.0000	0.9998	1.0000	1.0000	1.0000
5 US	0.0000	0.3215	0.8258	0.9793	0.9979	0.9998	0.9998	1.0000	0.9998	1.0000	1.0000	1.0000
10 US	0.0000	0.3215	0.8258	0.9793	0.9979	0.9998	0.9998	1.0000	0.9998	1.0000	1.0000	1.0000
20 US	0.0000	0.3215	0.8258	0.9793	0.9979	0.9998	0.9998	1.0000	0.9998	1.0000	1.0000	1.0000
50 US	0.0000	0.3215	0.8258	0.9793	0.9979	0.9998	0.9998	1.0000	0.9998	1.0000	1.0000	1.0000
100 US	0.0000	0.3215	0.8258	0.9793	0.9979	0.9998	0.9998	1.0000	0.9998	1.0000	1.0000	1.0000
200 US	0.0000	0.3215	0.8258	0.9793	0.9979	0.9998	0.9998	1.0000	0.9998	1.0000	1.0000	1.0000
500 US	0.0000	0.0079	0.0791	0.7870	0.9979	0.9998	1.0000	0.7740	0.9998	1.0000	0.9188	0.9280
1 MS	0.0000	0.0000	0.0001	0.0014	0.0137	0.1062	0.5170	0.9229	0.9998	1.0000	0.9485	0.9485
2 MS	0.0000	0.0001	0.0005	0.0052	0.0503	0.3798	0.9201	0.9982	0.9998	1.0000	1.0000	1.0000
5 MS	0.0000	0.0003	0.0033	0.0324	0.2800	0.9560	0.9999	1.0000	0.9999	1.0000	1.0000	1.0000
10 MS	0.0000	0.0008	0.0083	0.0796	0.5628	0.9992	1.0000	1.0000	0.9992	1.0000	1.0000	1.0000
20 MS	0.0000	0.0018	0.0181	0.1668	0.8372	0.9995	1.0000	1.0000	0.9995	1.0000	1.0000	1.0000
50 MS	0.0000	0.0048	0.0467	0.3797	0.9878	0.9996	1.0000	1.0000	0.9996	1.0000	1.0000	1.0000
100 MS	0.0000	0.0096	0.0918	0.6151	0.9956	0.9998	1.0000	1.0000	0.9998	1.0000	1.0000	1.0000
200 MS	0.0000	0.0188	0.1729	0.8381	0.9958	0.9998	1.0000	1.0000	0.9998	1.0000	1.0000	1.0000
500 MS	0.0000	0.0443	0.3603	0.9583	0.9964	0.9998	1.0000	1.0000	0.9998	1.0000	1.0000	1.0000
1 S	0.0000	0.0809	0.5515	0.9697	0.9973	0.9998	1.0000	1.0000	0.9998	1.0000	1.0000	1.0000
2 S	0.0000	0.1399	0.7241	0.9758	0.9979	0.9998	1.0000	1.0000	0.9998	1.0000	1.0000	1.0000
5 S	0.0000	0.2470	0.8201	0.9792	0.9979	0.9998	1.0000	1.0000	0.9998	1.0000	1.0000	1.0000
10 S	0.0000	0.3057	0.8257	0.9793	0.9979	0.9998	1.0000	1.0000	0.9998	1.0000	1.0000	1.0000

10<sup>-3</sup>, 10<sup>3</sup>



THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A OIL-FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 5.0000E-05 KD1= 4.0000E-01 KD2= 1.0000E-06  
DELTA= 1.0000E+00 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+04 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0020
1 US	0.0000	0.0452	0.3215	0.8258	0.9793	0.9979	0.9998	1.0000	1.0000
2 US	0.0000	0.0452	0.3215	0.8258	0.9793	0.9979	0.9998	1.0000	1.0000
5 US	0.0000	0.0452	0.3215	0.8258	0.9793	0.9979	0.9998	1.0000	1.0000
10 US	0.0000	0.0452	0.3215	0.8258	0.9793	0.9979	0.9998	1.0000	1.0000
20 US	0.0000	0.0452	0.3215	0.8258	0.9793	0.9979	0.9998	1.0000	1.0000
50 US	0.0000	0.0452	0.3215	0.8258	0.9793	0.9979	0.9998	1.0000	0.9188
100 US	0.0000	0.0452	0.3215	0.8258	0.9793	0.9979	0.9998	1.0000	0.9280
200 US	0.0000	0.0452	0.3215	0.8258	0.9793	0.9979	0.9998	1.0000	0.9485
500 US	0.0000	0.0079	0.0790	0.7861	0.9793	0.9979	0.9998	0.7739	1.0000
1 MS	0.0000	0.0000	0.0001	0.0014	0.0137	0.1061	0.5170	0.9229	1.0000
2 MS	0.0000	0.0001	0.0005	0.0052	0.0503	0.3796	0.9199	0.9982	1.0000
5 MS	0.0000	0.0003	0.0033	0.0323	0.2792	0.9545	0.9997	1.0000	1.0000
10 MS	0.0000	0.0008	0.0082	0.0790	0.5590	0.9974	0.9998	1.0000	1.0000
20 MS	0.0000	0.0018	0.0178	0.1640	0.8270	0.9977	0.9998	1.0000	1.0000
50 MS	0.0000	0.0046	0.0447	0.3642	0.9702	0.9977	0.9998	1.0000	1.0000
100 MS	0.0000	0.0088	0.0839	0.5701	0.9772	0.9979	0.9998	1.0000	1.0000
200 MS	0.0000	0.0158	0.1454	0.7415	0.9774	0.9979	0.9998	1.0000	1.0000
500 MS	0.0000	0.0292	0.2457	0.8134	0.9780	0.9979	0.9998	1.0000	1.0000
1 S	0.0000	0.0388	0.2979	0.8193	0.9788	0.9979	0.9998	1.0000	1.0000
2 S	0.0000	0.0437	0.3163	0.8234	0.9793	0.9979	0.9998	1.0000	1.0000
5 S	0.0000	0.0452	0.3213	0.8257	0.9793	0.9979	0.9998	1.0000	1.0000
10 S	0.0000	0.0452	0.3215	0.8258	0.9793	0.9979	0.9998	1.0000	1.0000

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A OIL-FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 5.0000E-05 KD1= 4.0000E-01 KD2= 1.0000E-06  
DELTA= 1.0000E+00 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+05 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0020
1 US	0.0000	0.0047	0.0452	0.3215	0.8258	0.9793	0.9579	0.9998	1.0000
2 US	0.0000	0.0047	0.0452	0.3215	0.8258	0.9793	0.9579	0.9998	1.0000
5 US	0.0000	0.0047	0.0452	0.3215	0.8258	0.9793	0.9579	0.9998	1.0000
10 US	0.0000	0.0047	0.0452	0.3215	0.8258	0.9793	0.9579	0.9998	1.0000
20 US	0.0000	0.0047	0.0452	0.3215	0.8258	0.9793	0.9579	0.9998	1.0000
50 US	0.0000	0.0047	0.0452	0.3215	0.8258	0.9793	0.9579	0.9998	0.9188
100 US	0.0000	0.0047	0.0452	0.3215	0.8258	0.9793	0.9579	0.9998	0.9280
200 US	0.0000	0.0047	0.0452	0.3215	0.8258	0.9793	0.9579	0.9998	0.9485
500 US	0.0000	0.0047	0.0452	0.3215	0.8258	0.9793	0.9579	0.7739	1.0000
1 MS	0.0000	0.0000	0.0001	0.0014	0.0136	0.1057	0.5165	0.9227	1.0000
2 MS	0.0000	0.0001	0.0005	0.0052	0.0500	0.3776	0.9184	0.9980	1.0000
5 MS	0.0000	0.0003	0.0032	0.0313	0.2709	0.9391	0.9979	0.9998	1.0000
10 MS	0.0000	0.0008	0.0076	0.0732	0.5229	0.9789	0.9979	0.9998	1.0000
20 MS	0.0000	0.0015	0.0150	0.1395	0.7351	0.9792	0.9979	0.9998	1.0000
50 MS	0.0000	0.0030	0.0296	0.2494	0.8224	0.9792	0.9979	0.9998	1.0000
100 MS	0.0000	0.0041	0.0399	0.3053	0.8248	0.9793	0.9979	0.9998	1.0000
200 MS	0.0000	0.0046	0.0444	0.3196	0.8249	0.9793	0.9979	0.9998	1.0000
500 MS	0.0000	0.0047	0.0451	0.3206	0.8252	0.9793	0.9979	0.9998	1.0000
1 S	0.0000	0.0047	0.0451	0.3210	0.8258	0.9793	0.9979	0.9998	1.0000
2 S	0.0000	0.0047	0.0452	0.3213	0.8258	0.9793	0.9979	0.9998	1.0000
5 S	0.0000	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979	0.9998	1.0000
10 S	0.0000	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979	0.9998	1.0000

10<sup>13</sup>, 10<sup>5</sup>

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A OIL-FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 5.0000E-05 KN1= 4.0000E-01 KD2= 1.0000E-06  
DELTA= 1.0000E+00 TD1= 4.0000E-04 TD2= 1.0000E+00

THE RADIATION PULSE IS 1.0000E+13 RADS/SEC FOR 2.5000E-06 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000E+06 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VOLTAGE

TIME	TAU (TIME CONSTANT)						
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US
0 MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1 US	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793
2 US	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793
5 US	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793
10 US	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793
20 US	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793
50 US	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793
100 US	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793
200 US	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793
500 US	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793
1 MS	0.0000	0.0000	0.0001	0.0013	0.0127	0.1017	0.5122
2 MS	0.0000	0.0000	0.0005	0.0048	0.0469	0.3583	0.9031
5 MS	0.0000	0.0002	0.0024	0.0233	0.2050	0.8066	0.9793
10 MS	0.0000	0.0004	0.0039	0.0381	0.2975	0.8258	0.9793
20 MS	0.0000	0.0005	0.0046	0.0446	0.3212	0.8258	0.9793
50 MS	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793
100 MS	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793
200 MS	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793
500 MS	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793
1 S	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793
2 S	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793
5 S	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793
10 S	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793

THIS TABLE IS THE CALCULATED TRANSIENT RADIATION RESPONSE  
OF A OIL-FILLED PAPER CAPACITOR

THE CAPACITOR PARAMETERS USED ARE:

KP= 5.0000e-05 KD1= 4.0000e-01 KD2= 1.0000e-06  
DELTA= 1.0000e+00 TD1= 4.0000e-04 TD2= 1.0000e+00

THE RADIATION PULSE IS 1.0000e+13 RADS/SEC FOR 2.5000e-08 SEC  
FOLLOWED BY A CONSTANT RATE OF 1.0000e+07 RADS/SEC

TAU IS THE TIME CONSTANT OF THE CAPACITOR CHARGING CIRCUIT.

THE VALUES GIVEN ARE THE RATIOS OF THE CAPACITOR VOLTAGE AT THE  
TIME INDICATED TO THE INITIAL CAPACITOR VCLTAGE

TIME	TAU (TIME CONSTANT)								
	INF	10 SEC	1 SEC	100 MS	10 MS	1 MS	100 US	10 US	1 US
C	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25 MS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0020
1 US	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979
2 US	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979
5 US	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979
10 US	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979
20 US	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979
50 US	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9182
100 US	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9273
200 US	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9475
500 US	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.7643	0.9979
1 MS	0.0000	0.0000	0.0001	0.0009	0.0088	0.0798	0.4718	0.9065	0.9979
2 MS	0.0000	0.0000	0.0003	0.0029	0.0280	0.2308	0.7741	0.9783	0.9979
5 MS	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979
10 MS	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979
20 MS	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979
50 MS	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979
100 MS	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979
200 MS	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979
500 MS	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979
1 S	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979
2 S	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979
5 S	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979
10 S	0.0000	0.0000	0.0005	0.0047	0.0452	0.3215	0.8258	0.9793	0.9979

THIS TABLE IS THE VOLTAGE ACROSS A CAPACITOR AT TIME  $t = 1 \text{ US}$   
 IF THE CAPACITOR IS INITIALLY CHARGED TO 1 VOLT THROUGH A  
 RESISTANCE  $\tau_{\text{AUO}}$  (COLUMNS) AND AT TIME  $t = 0$  A SHUNT RESISTANCE,  
 $\tau_{\text{AUS}}$  (ROWS) IS PLACED ACROSS THE CAPACITOR, BOTH THE SERIES  
 CHARGING RESISTANCE AND THE SHUNT RESISTANCE REMAINING IN THE  
 CAPACITOR CIRCUIT

		TAUO (SERIES TIME CONSTANT)							
TALS SHUNT TIME CONST	INF	10 S	1 S	100 MS	1C MS	1- MS	100 US	10 US	1 US
INF	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1C S	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1 S	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10C MS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1C MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
1 MS	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990	0.9994
10C US	0.9900	0.9900	0.9900	0.9900	0.9901	0.9901	0.9901	0.9905	0.9937
1C US	0.9048	0.9048	0.9048	0.9048	0.9048	0.9049	0.9053	0.9094	0.9394
1 US	0.3679	0.3679	0.3679	0.3679	0.3679	0.3681	0.3705	0.3935	0.5677

THIS TABLE IS THE VOLTAGE ACROSS A CAPACITOR AT TIME T= 10 US  
 IF THE CAPACITOR IS INITIALLY CHARGED TO 1 VOLT THROUGH A  
 RESISTANCE TAU0 (COLUMNS) AND AT TIME T=0 A SHUNT RESISTANCE,  
 TAU1 (ROWS) IS PLACED ACROSS THE CAPACITOR, BOTH THE SERIES  
 CHARGING RESISTANCE AND THE SHUNT RESISTANCE REMAINING IN THE  
 CAPACITOR CIRCUIT

TAUS SHUNT TIME CONST		TAUD (SERIES TIME CONSTANT)								
	INF	10 S	1 S	10C MS	1C MS	1 MS	10C US	10 US	1 US	
INF	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
1C S	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
1 S	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
10C MS	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000	
1C MS	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990	0.9994	0.9999	
1 MS	0.9900	0.9900	0.9900	0.9901	0.9901	0.9901	0.9905	0.9937	0.9990	
10C US	0.9042	0.9043	0.9043	0.9042	0.9049	0.9053	0.9094	0.9394	0.9901	
1C US	0.3679	0.3679	0.3679	0.3679	0.3681	0.3705	0.3935	0.5677	0.9091	
1 US	0.0000	0.0000	0.0000	0.0001	0.0001	0.0010	0.0099	0.0909	0.5000	



THIS TABLE IS THE VOLTAGE ACROSS A CAPACITOR AT TIME  $T = 100 \text{ } \mu\text{S}$  IF THE CAPACITOR IS INITIALLY CHARGED TO 1 VOLT THROUGH A RESISTANCE  $\tau_{\text{AUO}}$  (COLUMNS) AND AT TIME  $T = 0$  A SHUNT RESISTANCE,  $\tau_{\text{AUS}}$  (ROWS) IS PLACED ACROSS THE CAPACITOR, BOTH THE SERIES CHARGING RESISTANCE AND THE SHUNT RESISTANCE REMAINING IN THE CAPACITOR CIRCUIT

TALS SHUNT TIME CONST		TAUO (SERIES TIME CONSTANT)							
	INF	10 S	1 S	10C MS	1C MS	1 MS	10C US	10 US	1 US
INF	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1C S	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1 S	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000	1.0000
10C MS	0.9990	0.9990	0.9990	0.9990	0.9990	0.9990	0.9994	0.9999	1.0000
1C MS	0.9900	0.9900	0.9901	0.9901	0.9901	0.9905	0.9937	0.9990	0.9999
1 MS	0.9048	0.9048	0.9048	0.9049	0.9053	0.9094	0.9394	0.9901	0.9990
100 US	0.3679	0.3679	0.3679	0.3681	0.3705	0.3935	0.5677	0.9091	0.9901
1C US	0.0000	0.0000	0.0001	0.0001	0.0010	0.0099	0.0909	0.5000	0.9091
1 US	0.0000	0.0000	0.0000	0.0000	0.0001	0.0010	0.0099	0.0909	0.5000

THIS TABLE IS THE VOLTAGE ACROSS A CAPACITOR AT TIME  $t = 1 \text{ MS}$   
 IF THE CAPACITOR IS INITIALLY CHARGED TO 1 VOLT THROUGH A  
 RESISTANCE  $\tau$  (COLUMNS) AND AT TIME  $t = 0$  A SHUNT RESISTANCE,  
 $\tau$  (ROWS) IS PLACED ACROSS THE CAPACITOR, BOTH THE SERIES  
 CHARGING RESISTANCE AND THE SHUNT RESISTANCE REMAINING IN THE  
 CAPACITOR CIRCUIT

TAUS SHUNT TIME CONST		TAUD (SERIES TIME CONSTANT)								
INF		10 S	1 S	10C MS	1C MS	1 MS	10C US	10 US	1 US	
INF		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
10 S		0.9999	0.9999	0.9999	0.9999	0.9999	1.0000	1.0000	1.0000	
1 S		0.9990	0.9990	0.9990	0.9990	0.9994	0.9999	1.0000	1.0000	
10C MS		0.9900	0.9901	0.9901	0.9905	0.9937	0.9990	0.9999	1.0000	
10 MS		0.9048	0.9049	0.9053	0.9094	0.9394	0.9901	0.9990	0.9999	
1 MS		0.3679	0.3681	0.3705	0.3935	0.5677	0.9091	0.9901	0.9990	
10C US		0.0000	0.0001	0.0010	0.0099	0.0909	0.5000	0.9091	0.9901	
1C US		0.0000	0.0000	0.0001	0.0010	0.0099	0.0500	0.5000	0.9091	
1 US		0.0000	0.0000	0.0000	0.0001	0.0010	0.0099	0.0909	0.5000	

THIS TABLE IS THE VOLTAGE ACROSS A CAPACITOR AT TIME  $t = 10 \text{ MS}$  IF THE CAPACITOR IS INITIALLY CHARGED TO 1 VOLT THROUGH A RESISTANCE  $\tau$  (COLUMNS) AND AT TIME  $t = 0$  A SHUNT RESISTANCE,  $\tau$  (ROWS) IS PLACED ACROSS THE CAPACITOR, BOTH THE SERIES CHARGING RESISTANCE AND THE SHUNT RESISTANCE REMAINING IN THE CAPACITOR CIRCUIT

		TAU0 (SERIES TIME CONSTANT)							
TAU0 SHUNT TIME CONST	INF	10 S	1 S	100 MS	10 MS	1 MS	100 US	10 US	1 US
INF	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10 S	0.9990	0.9990	0.9990	0.9990	0.9994	0.9999	1.0000	1.0000	1.0000
1 S	0.9900	0.9901	0.9901	0.9905	0.9937	0.9990	0.9999	1.0000	1.0000
100 MS	0.9048	0.9049	0.9053	0.9094	0.9394	0.9901	0.9990	0.9999	1.0000
10 MS	0.3679	0.3681	0.3705	0.3935	0.5677	0.9091	0.9501	0.9990	0.9999
1 MS	0.0000	0.0001	0.0010	0.0099	0.0909	0.5000	0.9091	0.9901	0.9990
100 US	0.0000	0.0000	0.0001	0.0010	0.0099	0.0909	0.5000	0.9091	0.9901
10 US	0.0000	0.0000	0.0000	0.0001	0.0010	0.0099	0.0909	0.5000	0.9091
1 US	0.0000	0.0000	0.0000	0.0000	0.0001	0.0010	0.0099	0.0909	0.5000

THIS TABLE IS THE VOLTAGE ACROSS A CAPACITOR AT TIME  $T = 100 \text{ MS}$  IF THE CAPACITOR IS INITIALLY CHARGED TO 1 VOLT THROUGH A RESISTANCE  $\tau$  (COLUMNS) AND AT TIME  $T = 0$  A SHUNT RESISTANCE,  $\tau$  (ROWS) IS PLACED ACROSS THE CAPACITOR, BOTH THE SERIES CHARGING RESISTANCE AND THE SHUNT RESISTANCE REMAINING IN THE CAPACITOR CIRCUIT

TAUS SHUNT TIME CONST		TAU (SERIES TIME CONSTANT)								
	INF	10 S	1 S	100 MS	10 MS	1 MS	100 US	10 US	1 US	
INF	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
10 S	0.9900	0.9901	0.9905	0.9937	0.9990	0.9999	1.0000	1.0000	1.0000	
1 S	0.9048	0.9053	0.9094	0.9394	0.9901	0.9990	0.9999	1.0000	1.0000	
100 MS	0.3679	0.3705	0.3935	0.5677	0.9091	0.9901	0.9950	0.9999	1.0000	
10 MS	0.0000	0.0010	0.0099	0.0909	0.5000	0.9091	0.9901	0.9990	0.9999	
1 MS	0.0000	0.0001	0.0010	0.0099	0.0909	0.5000	0.9091	0.9901	0.9990	
100 US	0.0000	0.0000	0.0001	0.0010	0.0099	0.0909	0.5000	0.9091	0.9901	
10 US	0.0000	0.0000	0.0000	0.0001	0.0010	0.0099	0.0909	0.5000	0.9091	
1 US	0.0000	0.0000	0.0000	0.0000	0.0001	0.0010	0.0099	0.0909	0.5000	

THIS TABLE IS THE VOLTAGE ACROSS A CAPACITOR AT TIME  $T = 1 \text{ S}$   
 IF THE CAPACITOR IS INITIALLY CHARGED TO 1 VOLT THROUGH A  
 RESISTANCE  $\tau_{\text{AUX}}$  (COLUMNS) AND AT TIME  $T = 0$  A SHUNT RESISTANCE,  
 $\tau_{\text{SHUNT}}$  (ROWS) IS PLACED ACROSS THE CAPACITOR, BOTH THE SERIES  
 CHARGING RESISTANCE AND THE SHUNT RESISTANCE REMAINING IN THE  
 CAPACITOR CIRCUIT

TAUS SHUNT TIME CONST		TAUO (SERIES TIME CONSTANT)								
	INF	10 S	1 S	100 MS	10 MS	1 MS	100 US	10 US	1 US	
INF	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
10 S	0.9048	0.9094	0.9334	0.9901	0.9990	0.9999	1.0000	1.0000	1.0000	
1 S	0.3679	0.3935	0.5677	0.9091	0.9901	0.9990	0.9999	1.0000	1.0000	
100 MS	0.0000	0.0099	0.0909	0.5000	0.9091	0.9901	0.9990	0.9999	1.0000	
10 MS	0.0000	0.0010	0.0099	0.0909	0.5000	0.9091	0.9901	0.9990	0.9999	
1 MS	0.0000	0.0001	0.0010	0.0099	0.0909	0.5000	0.9091	0.9901	0.9990	
100 US	0.0000	0.0000	0.0001	0.0010	0.0099	0.0909	0.5000	0.9091	0.9901	
10 US	0.0000	0.0000	0.0000	0.0001	0.0010	0.0099	0.0909	0.5000	0.9091	
1 US	0.0000	0.0000	0.0000	0.0000	0.0001	0.0010	0.0099	0.0909	0.5000	

THIS TABLE IS THE VOLTAGE ACROSS A CAPACITOR AT TIME  $T = 10\text{ S}$   
 IF THE CAPACITOR IS INITIALLY CHARGED TO 1 VOLT THROUGH A  
 RESISTANCE  $\tau$  (COLUMNS) AND AT TIME  $T = 0$  A SHUNT RESISTANCE,  
 $\tau$  (ROWS) IS PLACED ACROSS THE CAPACITOR, BOTH THE SERIES  
 CHARGING RESISTANCE AND THE SHUNT RESISTANCE REMAINING IN THE  
 CAPACITOR CIRCUIT

TALS SHUNT TIME CONST		TAU (SERIES TIME CONSTANT)								
	INF	10 S	1 S	100 MS	10 MS	1 MS	100 US	10 US	1 US	
INF	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
10 S	0.3679	0.5677	0.9091	0.9901	0.9990	0.9999	1.0000	1.0000	1.0000	
1 S	0.0000	0.0909	0.5000	0.9091	0.9901	0.9990	1.0000	1.0000	1.0000	
100 MS	0.0000	0.0099	0.0909	0.5000	0.9091	0.9901	0.9990	1.0000	1.0000	
10 MS	0.0000	0.0010	0.0099	0.0909	0.5000	0.9091	0.9901	0.9990	0.9999	
1 MS	0.0000	0.0001	0.0010	0.0099	0.0909	0.5000	0.9091	0.9901	0.9990	
100 US	0.0000	0.0000	0.0001	0.0010	0.0099	0.0909	0.5000	0.9091	0.9901	
10 US	0.0000	0.0000	0.0000	0.0001	0.0010	0.0099	0.0909	0.5000	0.9091	
1 US	0.0000	0.0000	0.0000	0.0000	0.0001	0.0010	0.0099	0.0909	0.5000	



THIS TABLE IS THE VOLTAGE ACROSS A CAPACITOR AT TIME T= INF  
 IF THE CAPACITOR IS INITIALLY CHARGED TO 1 VOLT THROUGH A  
 RESISTANCE TAUO (COLUMNS) AND AT TIME T=0 A SHUNT RESISTANCE,  
 TALS (ROWS) IS PLACED ACROSS THE CAPACITOR, BOTH THE SERIES  
 CHARGING RESISTANCE AND THE SHUNT RESISTANCE REMAINING IN THE  
 CAPACITOR CIRCUIT

TAUS		TAUO (SERIES TIME CONSTANT)									
SHUNT	TIME	CONST	INF	10 S	1 S	100 MS	10 MS	1 MS	100 US	10 US	1 US
	INF		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
	10 S		0.0000	0.5000	0.9091	0.9501	0.9990	0.9999	1.0000	1.0000	1.0000
	1 S		0.0000	0.0909	0.5000	0.9091	0.9901	0.9990	0.9999	1.0000	1.0000
	100 MS		0.0000	0.0099	0.0909	0.5000	0.9091	0.9901	0.9950	0.9999	1.0000
	10 MS		0.0000	0.0010	0.0099	0.0909	0.5000	0.9091	0.9501	0.9990	0.9999
	1 MS		0.0000	0.0001	0.0010	0.0099	0.0909	0.5000	0.9091	0.9990	0.9990
	100 US		0.0000	0.0000	0.0001	0.0010	0.0099	0.0909	0.5000	0.9091	0.9901
	10 US		0.0000	0.0000	0.0000	0.0001	0.0010	0.0099	0.0909	0.5000	0.9091
	1 US		0.0000	0.0000	0.0000	0.0000	0.0001	0.0010	0.0099	0.0909	0.5000